

UTAS Architecture & Design with the City of Hobart

A collaboration between students, researchers and the city...

Research undertaken 2017-8 Published 02.09.2019

EXPANDING CITY
UNDERUTILISED SITES

SPE
CUL
ATE

EXPANDING CITY UNDERUTILISED SITES

SPECULATE: EXPANDING CITY - UNDERUTILISED SITES is part of a series of collaborative research projects developed by the Regional Urban Studies Laboratory (RUSL), at the University of Tasmania's (UTAS) School of Technology, Environments & Design (TED). This project was carried out in association with the City of Hobart (CoH) in summer 2017/18 as part of the CoH/UTAS research experience programme.

SPECULATE: EXPANDING CITY - UNDERUTILISED SITES
© 2018 UTAS + CoH
ALL RIGHTS RESERVED

PROJECT leaders

Helen Norrie | UTAS | RUSL | Regional Urban Studies Laboratory
Stuart Baird | City of Hobart
Sarah Bendeich | City of Hobart

SPECULATE project team

Emma Hall Sarah Bomford Mary McNeill Aaron Oh

PROJECT advisor

Ben Thorp | CoH

EDITED by

Helen Norrie 20190902
Stuart Baird Sarah Bendeich Niamh O'Hara Katelyn White

ACKNOWLEDGMENT

Thanks to the City of Hobart GIS team, and to Ben Ikin and Leigh Woolley for generosity of time and expertise.

SPECULATE I collaborative design research

The City of Hobart and University of Tasmania Architecture & Design collaborative design research project - SPECULATE - explores a range of urban and cultural issues that are directly related to the physical environment of the city. Projects that span across the disciplines of architecture, urban design, landscape architecture and planning are developed collaboratively with UTAS academics, students and Council staff from a range of departments.

Since 2012 more than 20 projects have provided an opportunity to engage in a deep inquiry around fundamental urban issues, particularly those sited at the periphery of day-to-day operational concerns, but that are central to broader scale strategic thinking. Research through the medium of design provides a broad framework that allows problems to be seen in a different light, utilizing a process of iterative thinking and speculative design, which is founded on in-depth research and best-practice precedents.

RUSL I Regional Urban Studies Laboratory is a collaborative urban design research project led by Dr Helen Norrie, which engages directly with local councils and communities to examine urban spatial, temporal and social issues in small towns and cities. RUSL explores the intersection of development, planning and urban design, examining the agency of architecture to engage with broader urban and cultural narratives.

DISCLAIMER: This report has been prepared for the purposes of research and may only be used and relied on for that purpose. The report has been prepared with information available at the time, however there has been no independent verification or checking of the information and neither the University of Tasmania nor the Hobart City Council accept any liability for any loss or damage a person suffers because that person has directly or indirectly relied on any information, including errors or omissions, contained in the report.

CONTENTS

expanding city | underutilised sites

| | | |
|---|--|----|
| PROJECT OVERVIEW | brief objectives + research questions research methodology + outcomes | 5 |
| SITE SURVEY | study area topography land use planning scheme heritage places + precincts | 8 |
| UNDERUTILISED SITES | identifying underutilised sites visual survey identifying underutilised sites central business + commercial districts identifying underutilised sites land value vs capital value identifying underutilised sites city shaping sites + development precincts identifying underutilised sites lessons from helsinki + singapore | 16 |
| SPECULATION CITY SHAPING SITES | case study 103 melville street current planning issues speculation permissible and ideal solutions speculation urban character speculation case study comparison speculation visualisations | 32 |
| BEST PRACTICE + CASE STUDIES | design criteria city quality public space permeability urban grain case studies precinct plans west melbourne helsinki singapore design criteria housing qualities case studies small - medium - large | 52 |
| REFERENCES | bibliography | 75 |



image : Leigh Woolley from "Building Heights Standards Review"

expanding city

underutilised sites

The City of Hobart is experiencing a boom in development, with land and property values increasing at unprecedented rates. This is impacting on housing affordability, traffic flow, and is rapidly changing the physical environment of the city.

In a city that is used to a slower pace of change, development is now in full flight, as demolition and construction in the city centre become the norm. Cranes are dominating the skyline and interstate and foreign investment is increasing. There is a sense of impending rapid change which is promoting an interest in ensuring how future growth can be accommodated, while also retaining the qualities that make Hobart unique.

This project considers potential for development in central Hobart, examining how the current planning provisions may impede or foster different outcomes. It identifies a range of sites within the 60 inner city blocks of the CBD that offer a potential for redevelopment. Speculative propositions for sites that draw on best practice examples are used to provide visualisations of positive urban scenarios, which can be used for discussion with the community about the future of the city.

The identification of opportunities to improve visual and physical connectivity in and around key sites are considered, through a speculative process that asks “what if?” considering a range of possibilities and exploring ways that different potential scenarios may be realised.

The exploration of the development potential of key sites also considers opportunities to review the efficacy of current Zoning and Overlays around key development sites, investigating the implications if the provisions remain static. This initial speculative project reveals the potential for more indepth research to be carried out to examine generalised ideas in greater detail.

objectives

- To examine scenarios for future development of the CBD, particularly for medium density housing, investigating the implications for city infrastructure and amenity.
- To speculate on potential sites of future development in the CBD and its fringes.
- To identify individual sites of high re-development potential that could be understood as ‘city shaping sites.’
- To explore potential development scenarios in relation to existing permitted use and development under the *Hobart Interim Planning Scheme 2015*
- To speculate a range of scenarios, drawing on best-practice examples.

research questions

At this time of unprecedented change, this report considers:

- What are the key indicators to identify underutilised sites?
- What development is possible on these sites within the current density and height limits?
- What form could potential scenarios take?
- How could the existing Planning Scheme support these scenarios?

It leads to a series of other questions to be explored in future projects:

- How do we preserve the “character” of Hobart as the urban form develops?
- How can the changing urban form support connectivity and movement, and ensure adequate green space as the density of development increases?
- How can the planning for future development strategically preserve and increase amenity?

PROJECT OVERVIEW

Exploring how the city centre may develop, identifying potential growth opportunities within the inner city and exploring the implications for the urban fabric, land use and public life.



Image: Mary McNeill

PROJECT OVERVIEW

research method + outcomes

research method

Analysis based on observation, Listmap and GIS data, and assessment of planning regulations is used to inform this study.

Speculative ideas draw on examples from a range of precedent projects, demonstrating best practice development that provides a high level of civic amenity, within the constraints of the current planning scheme.

Other possible scenarios that result in higher yield and density may also produce good urban design outcomes, and these should be explored in future studies.



A site survey and analysis was conducted through two modes:

1 data analysis

Data from a range of sources was collated for each of the 1364 lots in the subject area to create a data set to work with. These sources are listed below:

City of Hobart Geographic Information System (GIS maps Geocortex)

- Heritage places Heritage precincts
- Land use Land area

ListMap (via Office of the Valuer-General)

- Land value Capital value

Sullivans Cove Planning Scheme 1997

Hobart Interim Planning Scheme 2015

- Zoning

GIS data attaching land use to each lot was simplified to reflect current use rather than further detail about building typology, as shown below.

2 visual analysis

An initial scoping was made with an examination of underutilised sites within the subject area. This was a visual survey, undertaken to gain a familiarity with the subject area and to begin the identification process of underutilised land from a qualitative perspective. In this initial stage, sites (lots) were categorised as underutilised if they were identified as

- Vacant buildings
- Car parks on grade
- Industrial or warehouse buildings
- Commercial and residential buildings deemed to have:
 - Little contribution to the street-scape
 - Partial lot coverage
 - A low rise nature.

case study

The largest site in the surveyed area was chosen as a case study example, with a speculative proposition for this site developed and assessed in relation to the *Hobart Interim Planning Scheme 2015*.

- current planning issues and opportunities
- massing studies of a range of scenarios
- evaluation of opportunities relating to site character
- precedent comparison drawing on best practice examples from other cities to provide ways of understanding future potential
- lessons from precedents applied to local case study sites.

outcomes

The report presents issues for the expanding city in a number of ways:

+ A mapped city:

Underutilised sites identified with key parcels of land and “hotspot” city blocks for redevelopment identified.

+ An understanding of the physical form development may take:

Exploring the current permitted envelope, evaluating potential development in accordance with the Planning Scheme and presenting “acceptable solutions” in relation to existing regulations, highlighting the height disparity connected to permitted uses.

+ A consideration of optimisation of land use:

Determining the appropriateness of permitted land use for lots of high potential for redevelopment.

+ Sites evaluated:

Comparison of development outcomes based on an alternative “ideal” scenario reflecting the changing needs of the city. Consideration of potential for city shaping and options for strategically managing the impacts of development on significant underutilised sites.

assumptions

For the purpose of this speculative exercise it has been assumed that ownership of the lot or lots that many comprise a site does not have an impact on the development potential of the site.

Although adaptive reuse, reprogramming or other interventions may be possible on some sites, propositions explored in this report replace the existing structure: Further speculation around reuse will generate a range of other interesting scenarios.

SITE SURVEY

inner residential



121 Bathurst St

urban mixed use



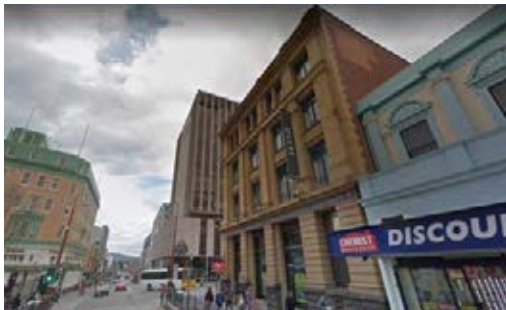
5 Warwick St

open space



EC Skate Park, Tasma St

central business



73 Collins St

commercial



177 Murray St

sullivans cove



TMAG Davey St

SITE SURVEY

context

Hobart, Tasmania's capital, is situated in the south of the state. Resting between Mount Wellington and the River Derwent, it is unique in its location and character. Colonial settlement began in 1804, making Hobart the second oldest city in Australia. Early colonial buildings were predominantly Georgian in style, and are now seen as key heritage sites throughout the city, as well as fine examples of Edwardian and Victorian architecture. Hobart saw an increase in population by 25,963 from 2011 to 2016 (Population Australia 2018) and the population continues to expand.

Cruise ships frequent Hobart in the summer, with 36 ships visiting in 2019 (Tasmanian Travel and Information Centre 2017). The main vehicular links into the town are the Tasman Highway, the Brooker Highway and the Southern Outlet, with the first two carrying over 50,000 vehicles per day each (Department of Infrastructure, Energy and Resources 2011). With population, tourism and investment increasing in the state, the city is experiencing a period of unprecedented development pressure and expansion.



SITE SURVEY

study area

The study explores an inner city zone that is perceived to have a high redevelopment potential, due to a large number of underutilised sites.

The study considers how future development in this area may dramatically impact on the form, function and amenity of the city.

The study covers 64 blocks, comprising of 1364 lots of land bounded by:

- Davey Street to the South
- Burnett street to the North,
- Brooker Highway in the East
- Molle and Harrington Streets



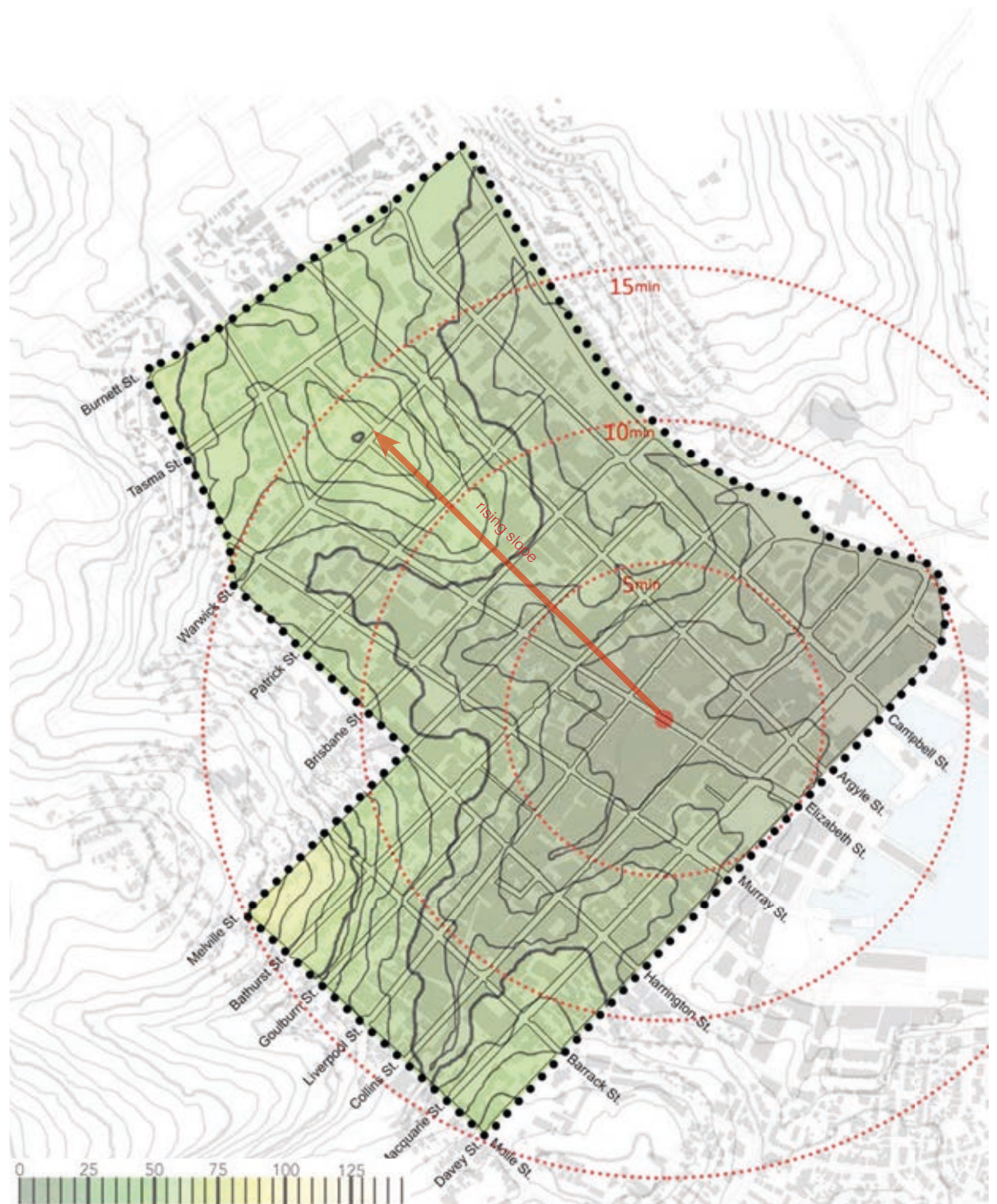
SITE SURVEY

topography

Analysis of the topography of the inner city reveals that the city rises to the north and west, with key north-south roads running in parallel with the slope of the ground.

Red dotted circles indicate walking time from Elizabeth Street Mall

- 5 minutes
- 10 minutes
- 15 minutes.



SITE SURVEY

land use

Land use indicates sites allocated for educational, civic and religious purposes, which are unlikely to be available for re-development.

findings

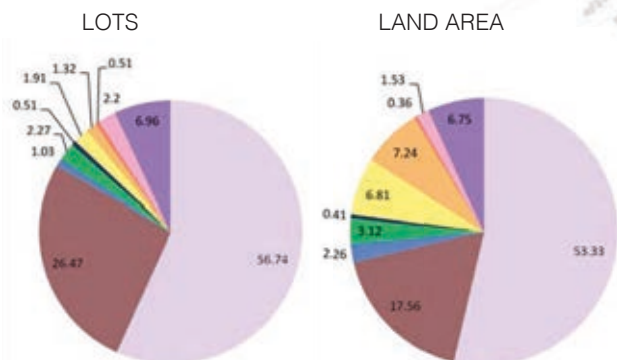
Over 50% of both lots and land in the study area are zoned commercial use, and 25% of lots are zoned for residential, which is the second highest category, occupying 17% of land area of the inner city.

limitations

Broad categories were used to simplify this process.



Land use within subject area
(% of total lots)



These results may be subject to variation due to unresolved data quality issues.

SITE SURVEY

planning scheme

Planning Scheme zoning in the inner city.

findings

Almost 50% of the lots in the inner city are within the Central Business Zone.

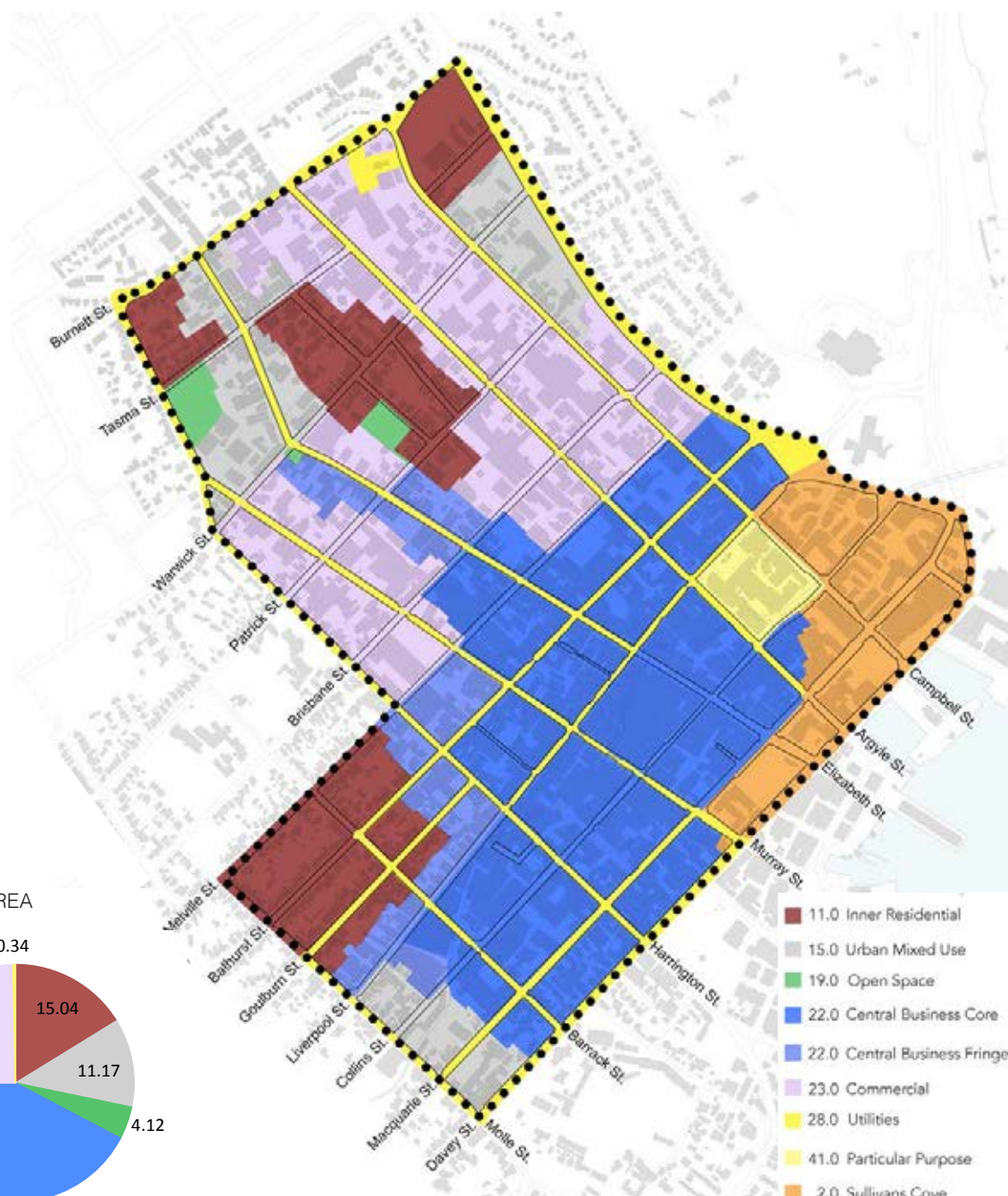
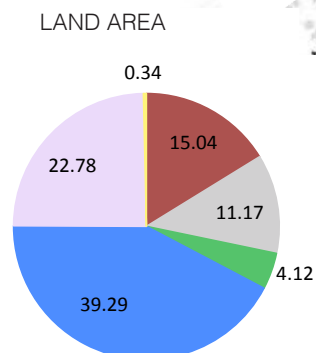
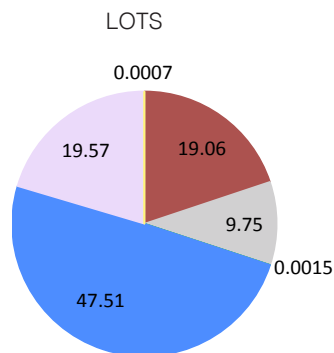
The Inner Residential areas are confined to Trinity Hill and the rises into West and North Hobart, as well as the Campbell Street Primary School Precinct.

limitations

Potential impacts of other overlays were relatively minor and thus not mapped (except for Heritage and Central Business Fringe overlays).

Provisions protecting residential amenity require a more in depth analysis.

Planning Scheme Zones within subject area
(% of total lots)



SITE SURVEY

heritage places

Heritage places are specific buildings or sites of heritage significance.

This data was deemed important as it was considered that the restrictions to development imposed by the Historic Heritage Code may make a site a less likely target for larger scale redevelopment.

findings

Heritage places take up 32% of all lots in the subject area, and 39% of all land area.

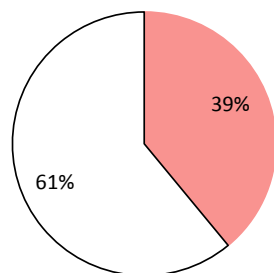
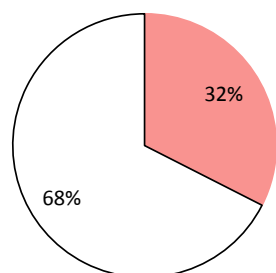
limitations

The constraints imposed by the code varies in different zones.

Heritage places within subject area
(% of total lots)

LOTS

LAND AREA



These results may be subject to variation due to unresolved data quality issues.

SITE SURVEY

heritage precincts

Heritage places are localised areas of heritage significance. Not all buildings and sites in these areas are necessarily heritage places.

Heritage Precincts were seen to impact possible development, and it is assumed that areas without heritage controls are more likely to be chosen for larger scale redevelopments.

findings

Approximately 27% of the land area within the subject area lies within a Heritage Precinct, and these are clustered around:

- Trinity Hill and the inner residential areas of North Hobart
- Campbell Primary School Precinct
- Inner West Hobart and along the Macquarie Ridge
- Along the Hobart Rivulet.

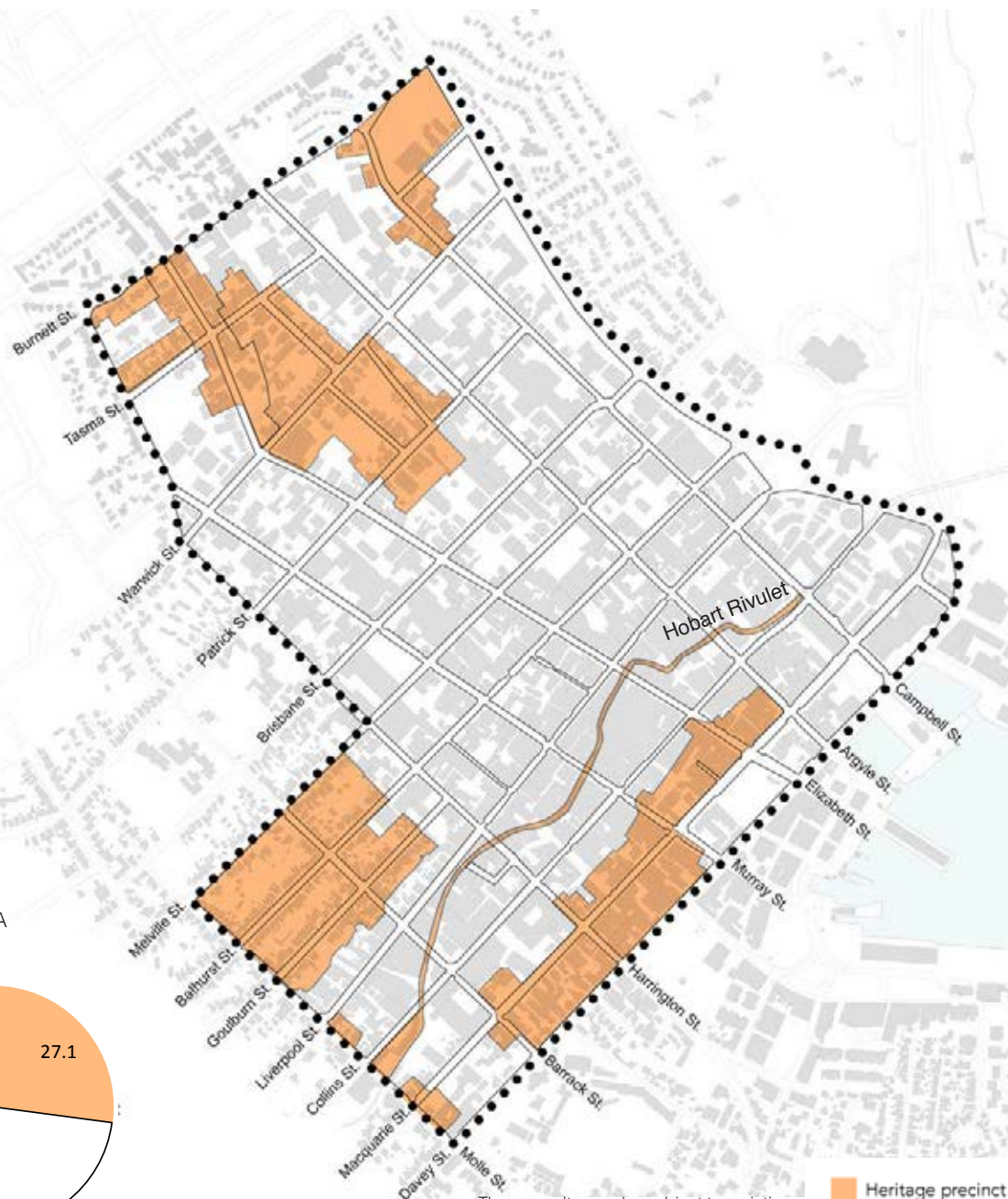
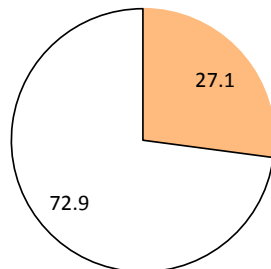
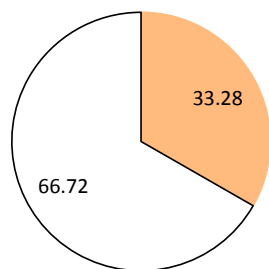
limitations

The constraints imposed by the code varies in different zones.

Heritage precincts within subject area
(% of total lots)

LOTS

LAND AREA



These results may be subject to variation due to unresolved data quality issues.

Heritage precinct

UNDERUTILISED SITES

Two techniques were used to determine underutilised sites.

+ visual survey - qualitative assessment

A visual assessment of the use, character, architectural quality and building condition was used to determine sites that have the potential to contribute more positively to the city character and to accommodate higher yield.

+ land use vs capital value - quantitative assessment

Data from the Office of the Valuer General (publicly available via the ListMap) was used to determine the potential improvement of the value of the site, using a ratio of land use to capital value.



CARPARK:
25 Goulburn St.

visual survey

A visual survey was undertaken to identify underutilised sites from a qualitative perspective. Lots were categorised as underutilised if they were identified as

- Vacant buildings
- Car parks on grade
- Industrial or warehouse buildings
- Commercial and residential buildings deemed to have:
 - Little contribution to the street-scape
 - Partial lot coverage
 - A low rise nature.

building quality

Building quality is a key consideration in assessing underutilised sites and the character of the future city. This study used a qualitative visual analysis identifying architectural styles of interest which may not have Heritage significance.

- | | |
|--------|---|
| Low | - No architectural merit or contribution to street-scape, may use poor quality materials or poor construction |
| Medium | - Some interesting architectural detail, makes some contribution to the street-scape, reasonable construction standard |
| High | - Building of good design, makes a positive contribution to the street-scape, well constructed with high quality material selection |

building condition

Also qualitative, this assessment considered the likelihood that an existing building may be demolished to make way for new development.

- | | |
|--------|--|
| Low | - Poor condition typically ill-maintained, low architectural value |
| Medium | - Average condition, may have little architectural merit, may have some re-use value |
| High | - Well-maintained and/or architectural merit |



COMMERCIAL – car yard:
47-53 Brisbane St.

UNDERUTILISED SITES

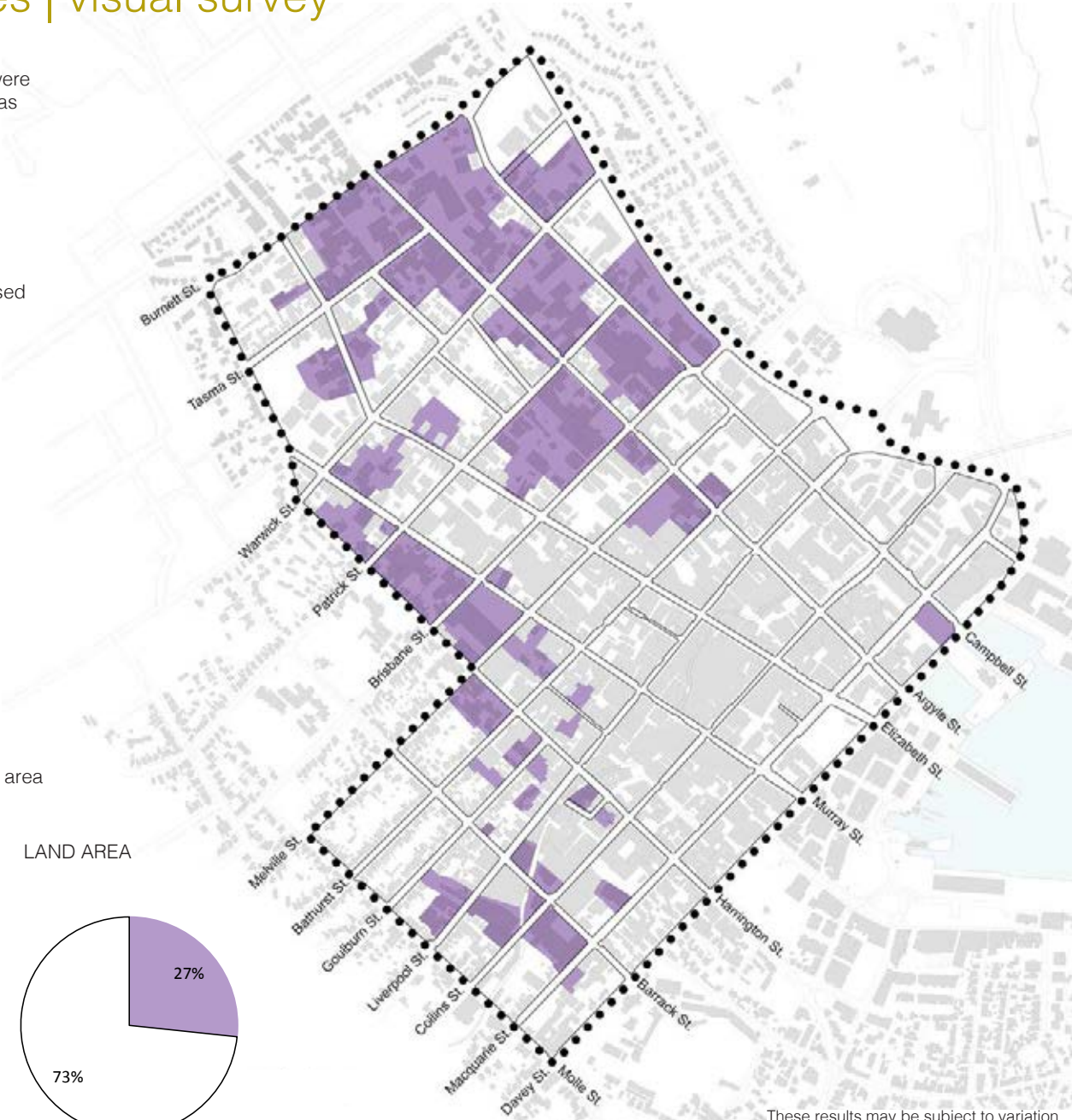
identifying sites | visual survey

This map identifies the lots that were selected through visual analysis as underutilised in terms of

- use/occupancy
- building quality
- building condition

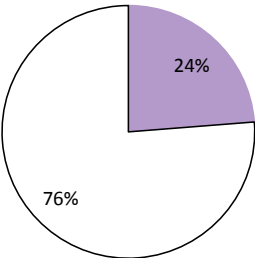
findings

The sites identified as underutilised were concentrated toward the northern and western fringe.

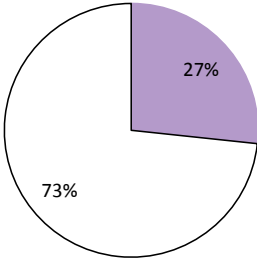


Underutilised sites within subject area (% of total lots)

LOTS



LAND AREA



These results may be subject to variation due to unresolved data quality issues.

UNDERUTILISED SITES

identifying sites | visual analysis | central business zone

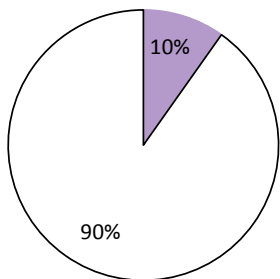
This is an overlay of the Central Business zone onto the underutilised sites identified in the visual survey of the subject area.

findings

There are minimal underutilised sites that are present within the Central Business Zone, with only 10% of all lots being identified as underutilised. This strengthens the idea that there are minimal underutilised sites close to the city centre.



Underutilised lots within the Central Business Zone
(% of total lots)



UNDERUTILISED SITES

identifying sites | visual analysis | commercial zone

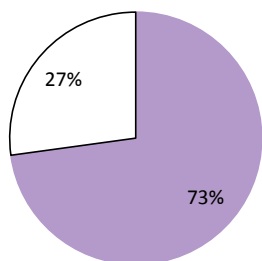
This map is an overlay of the Commercial zone from the Planning Scheme onto the underutilised sites identified in the visual survey of the subject area.

findings

A significant number of underutilised sites identified in the field work were present in the Commercial Zone with 73% of all lots being identified visually as underutilised.



Underutilised lots within the Commercial Zone
(% of total lots)



UNDERUTILISED SITES

identifying sites | eliminating heritage places + precincts

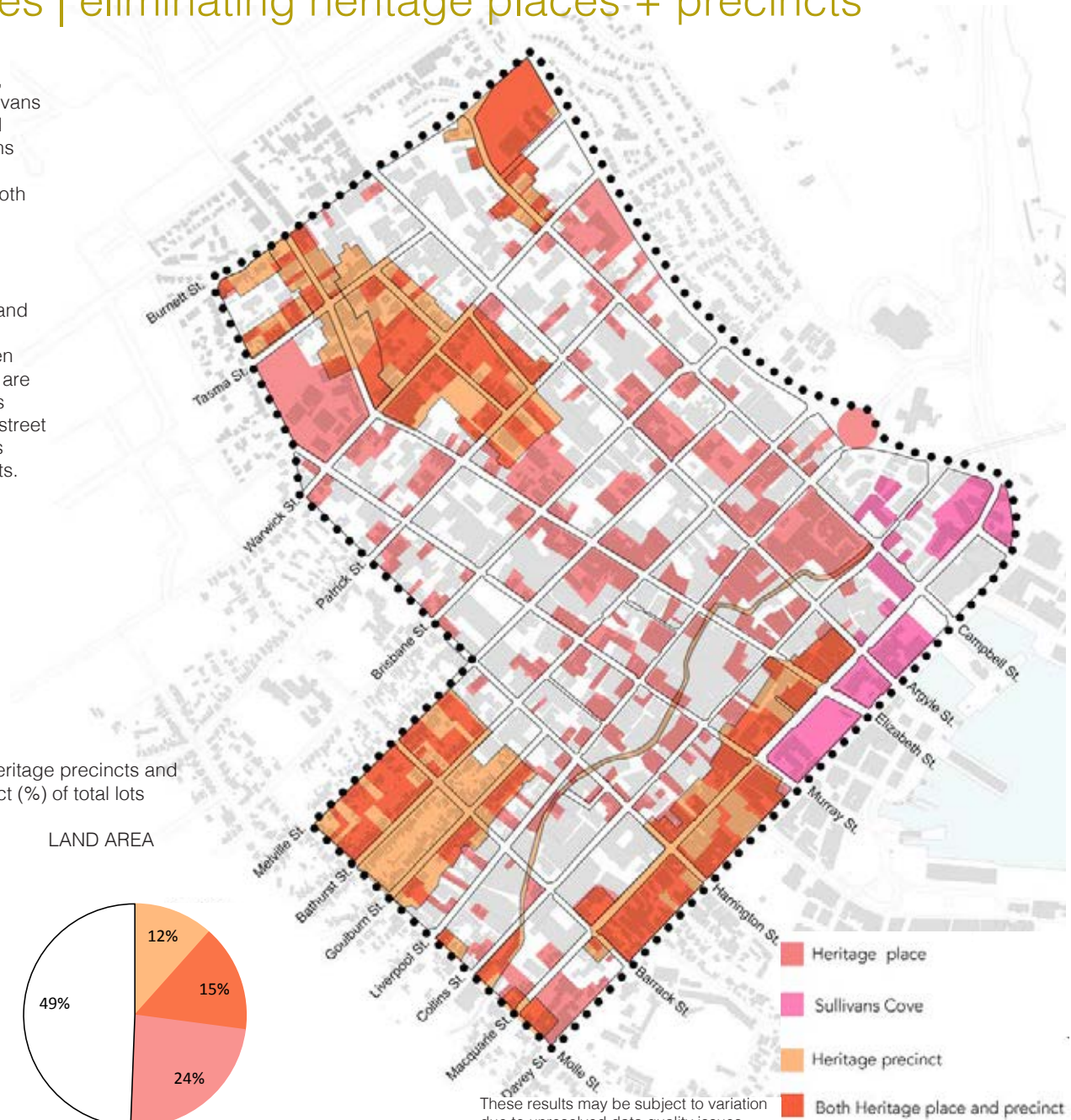
Overlaying the Heritage Places, Heritage Precincts and the Sullivans Cove zone illustrates the overall extent of Heritage considerations

Some lots are categorised as both Heritage Listing (Place) and Heritage Overlay (Precinct).

findings

Approximately half of the total land area of the city is impacted by Heritage considerations, as seen in the pie graphs below. There are certain parts of the city, such as toward North Hobart on Argyle street that have significantly fewer lots impacted by heritage constraints.

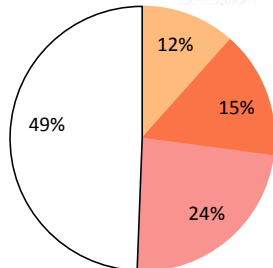
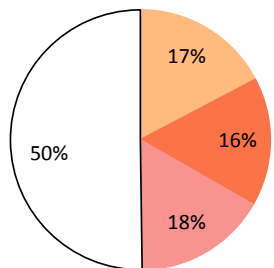
The relative impact of heritage provisions is unique to each site.



Comparison heritage places, heritage precincts and both heritage place and precinct (% of total lots)

LOTS

LAND AREA



These results may be subject to variation due to unresolved data quality issues.

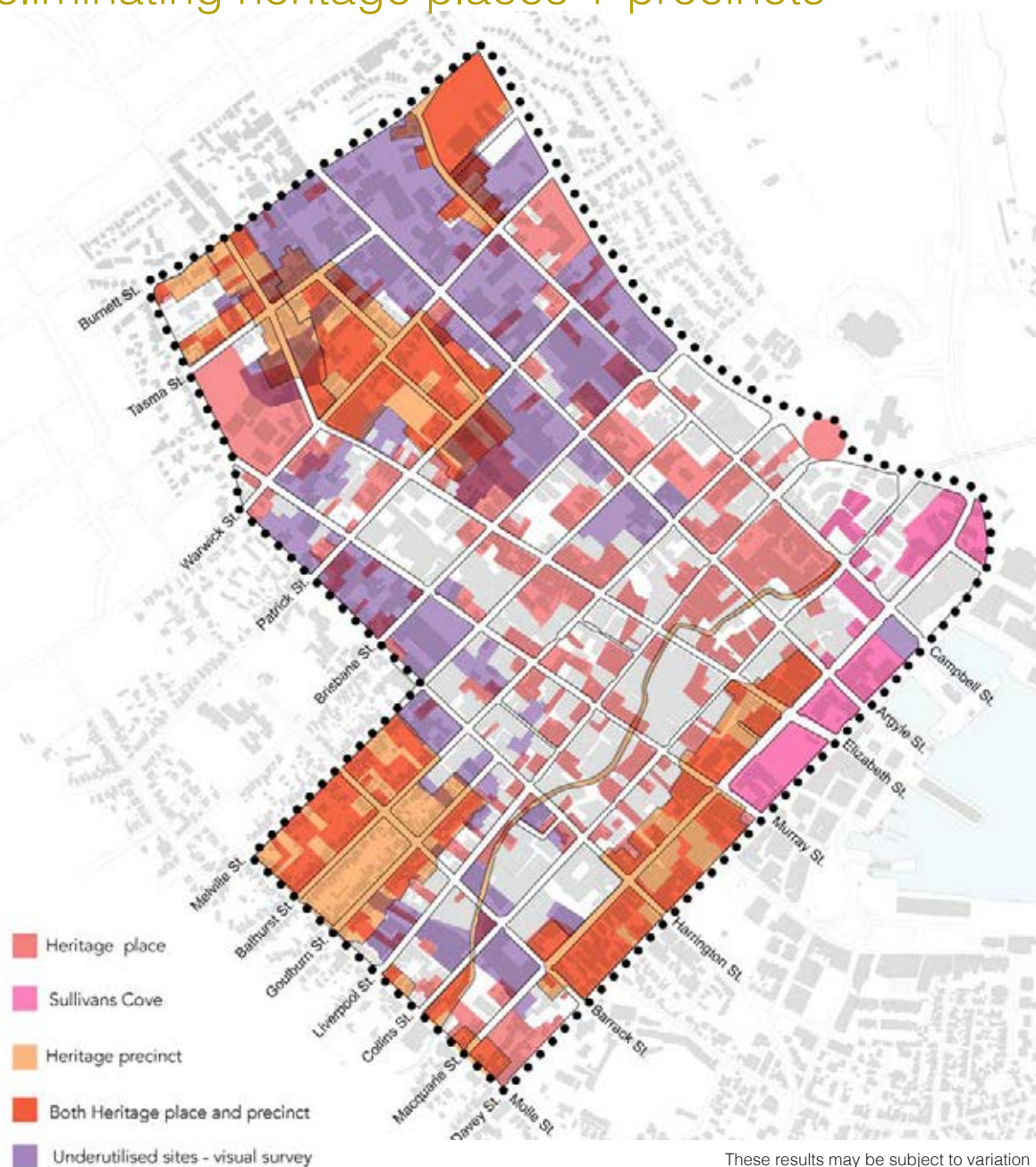
UNDERUTILISED SITES

identifying sites | eliminating heritage places + precincts

The combined heritage data was mapped against the visual survey of under utilised sites.

findings

This mapping suggests most of the heritage impacted land was not identified as underutilised in the visual survey.



These results may be subject to variation due to unresolved data quality issues.

UNDERUTILISED SITES

identifying sites | land value vs capital value

An initial assessment of lots in the subject area shows the relationship between land value and capital value varies, as an indicator of utilisation.

As a generalisation, sites that have undergone little capital improvement offer a strong potential for development. These “underutilised sites” are identified by comparing the land value and capital value as a percentage.

- A high percentage represents a site that has a proportionally high land value to capital value, indicating underutilisation.
- A low percentage represents a site with proportionately low land value to capital value, indicating it is well utilised.

findings

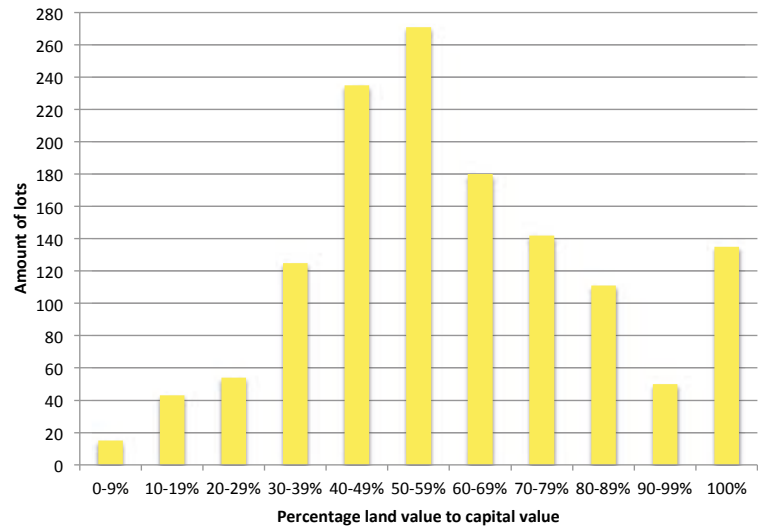
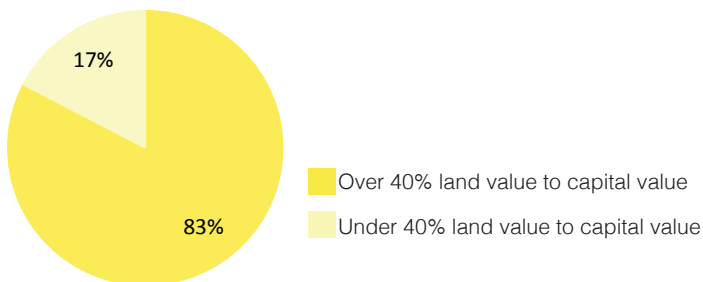
Across the study area, there was a range of 95.9%, the lowest value being 4.1% and the highest 100%.

Most lots that had a low percentage, that is, sites that have been well utilised, generally had contemporary buildings with high medium to high plot ratio. This is particularly apparent in developments in the last 10 years. Similarly, significant government/civic buildings of varying ages also demonstrate a high level of site utilisation.

Those lots where land value and capital value are at or close to 100% showed low rise, poor site coverage, older buildings that were disused or not well occupied, and/or large areas used for car parking or car sales.

Some sites that show high percentage would likely still not be considered for redevelopment due to other values related to the site, particularly heritage considerations. These were eliminated from the selection.

Lots over and under 40% land value to capital value
(% of total lots)



land value

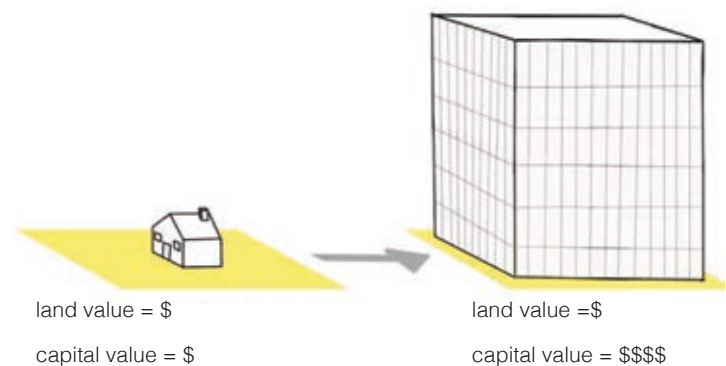
The value of the property including draining, excavation, filling, reclamation, clearing and any other invisible improvements made to the land.¹

(source: dipipwe.tas.gov.au/land-tasmania/office-of-the-valuer-general/notice-of-valuation)

capital value

Total value of the property (including the land value), excluding plant and machinery.

(source: dipipwe.tas.gov.au/land-tasmania/office-of-the-valuer-general/notice-of-valuation)



These results may be subject to variation due to unresolved data quality issues.

UNDERUTILISED SITES

identifying sites | land value vs capital value | 40% filter

A sample of sites in the subject area were selected to find a specific value at which a site may be considered underutilised. Through visual analysis, a trend was found where lots with under a 40% land value to capital value appeared to be well utilised.

| lot address | land area | % land value to capital value |
|--------------------------|-----------|-------------------------------|
| 254-286 Liverpool Street | 3352 | 11.11 |
| 19-27 Argyle street | 1082 | 8.13 |
| 179-191 Murray Street | 4376 | 23.03 |
| 40-42 Brisbane Street | 1974 | 21.77 |
| 57 Warwick Street | 2251 | 36.59 |
| 250-270 Murray Street | 1872 | 31.90 |
| <hr/> | | |
| 131 Collins Street | 1423 | 47.73 |
| 281-301 Argyle Street | 3289 | 44.44 |
| 9 Warwick Street | 1004 | 63 |
| 79 Brisbane Street | 1736 | 58.33 |
| 31 Warwick Street | 1169 | 85.19 |
| 233 Murray Street | 1474 | 75 |
| 10 Tasma Street | 1781 | 100 |
| 210-218 Argyle Street | 2002 | 100 |

WELL UTILISED



254-286 Liverpool Street



19-27 Argyle street



179-191 Murray Street



40-42 Brisbane Street



57 Warwick Street



250-270 Murray Street

UNDER-UTILISED



131 Collins Street



281-301 Argyle Street



9 Warwick Street



79 Brisbane Street



31 Warwick Street



233 Murray Street



10 Tasma Street



210-218 Argyle Street

UNDERUTILISED SITES

identifying sites | land value vs capital value

Determining potential development sites can also be done through quantitative analysis, evaluating the relationship between land value and capital value. Testing data analysis against visual analysis, a benchmark of 40% land value to capital value is used to determine underutilised sites.

Heritage Places, lots within Heritage Precincts or with specific land uses and lots with a land area of under 200m² are filtered out of the selection, highlighting the over 400 lots that offer potential for development.

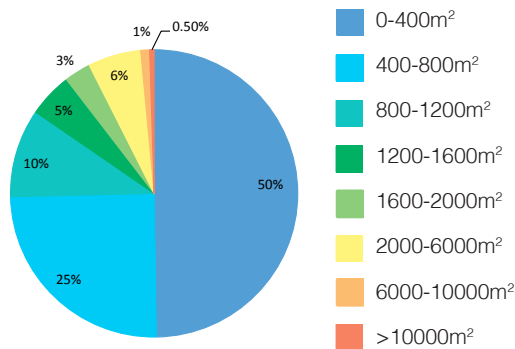
order of filters

- Filter 1: Heritage building
- Filter 2: Land value/capital value
- Filter 3: Land area
- Filter 4: Land use
- Filter 5: Heritage precinct

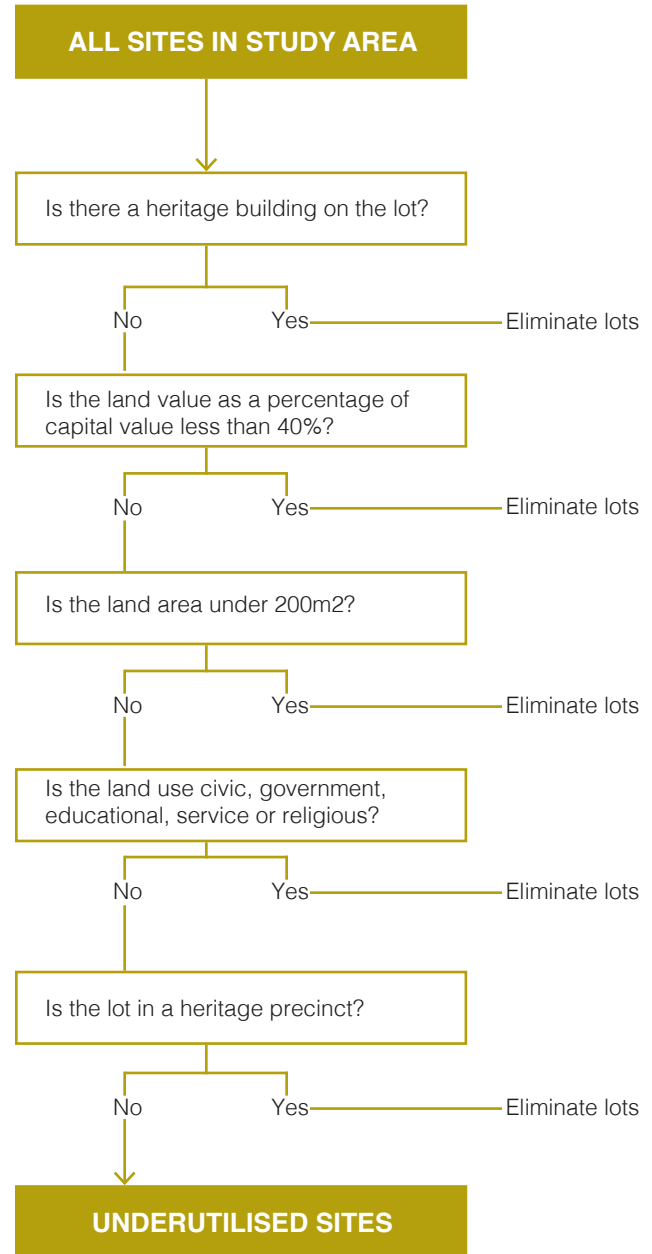
an alternative approach

An alternative approach to identifying underutilised sites is used in a West Melbourne study, which identified either unoccupied sites or low yield uses (lots that require a large amount space in proportion to the economic return for the activity). The uses included manufacturing, equipment installation, car parking, car retailing, car showrooms, wholesaling and workshops or studios. This would be a valid alternative approach to the filtering process that has been utilised.

Land area of lots within subject area
(% of total lots)



These results may be subject to variation due to unresolved data quality issues.



UNDERUTILISED SITES

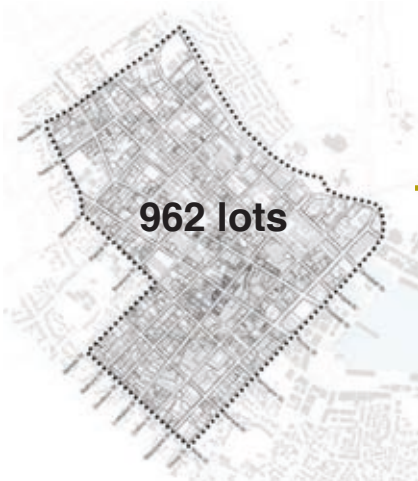
identifying sites | land value vs capital value

Is there a heritage building on the lot?



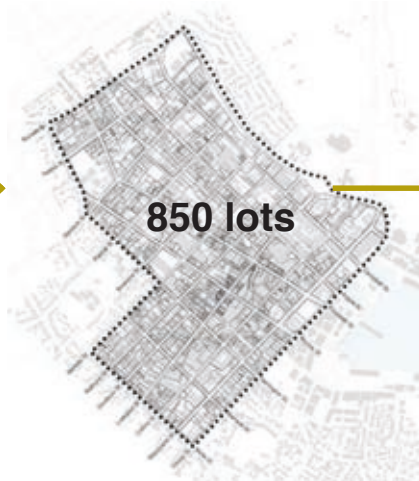
Eliminate lots with Heritage buildings present

Is the land value as a percentage of capital value less than 40%?

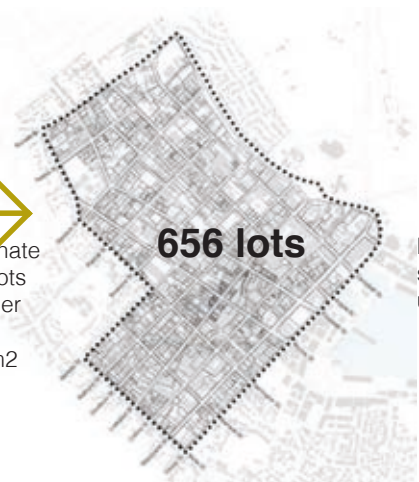


Eliminate any lots with capital value as a percentage of land value less than 40%

Is the land area under 200m²?



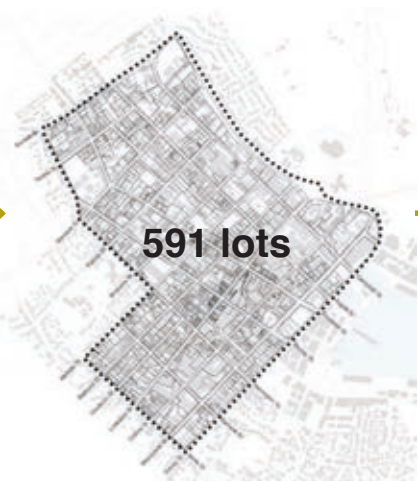
Is the land use civic, government, educational, service or religious?



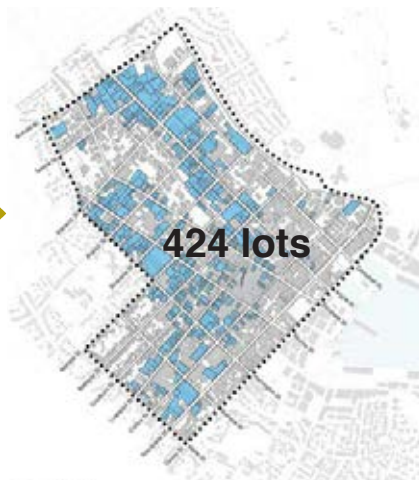
Eliminate any lots smaller than 200m²

Eliminate specific land uses

Is the lot in a heritage precinct?



Eliminate lots within heritage precincts



UNDERUTILISED SITES

identifying sites | under-performing land value vs capital value

This map shows the sites that were identified as underutilised through the analysis of land value vs capital value, eliminating Heritage Places and sites with Heritage Precincts, lots zoned Special Use or less than 200m².

findings

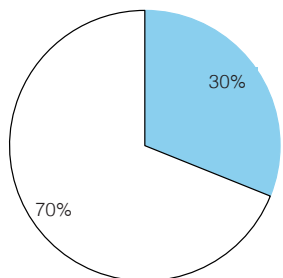
A total of 424 lots were identified, which is approximately 30% of the total lots in the study area.

other factors to investigate

There are other fields that were considered and may have been useful indicators in this data set, however, these were unable to be accessed in the time period available for this project. These factors were:

- Density
- Site coverage
- Year of construction

Underutilised lots
(%)



These results may be subject to variation due to unresolved data quality issues.

UNDERUTILISED SITES

identifying sites | comparing land/capital value + visual survey

This map shows a comparison between the initial visual survey for underutilised sites and the filtered data results.

findings

The majority of the lots were identified in both the visual stage and filter stage. There are a large number of lots identified by the filter process in the centre of Hobart that were not picked up in the visual survey.



These results may be subject to variation due to unresolved data quality issues.

UNDERUTILISED SITES

potential key development sites

observations

+ Underutilised sites are located in two potential development spines.

+ The majority of the underutilised sites identified are in the commercial zone

+ There are a number of large sites that have the potential of “city shaping” impacts (for better or worse). Consideration of these sites as key future development opportunities is important in examining potential future use and character.

+ Opportunities to subdivide large blocks or amalgamate smaller blocks and create new relationships has the potential to impact the built form on pedestrian access and amenity.

recommendations

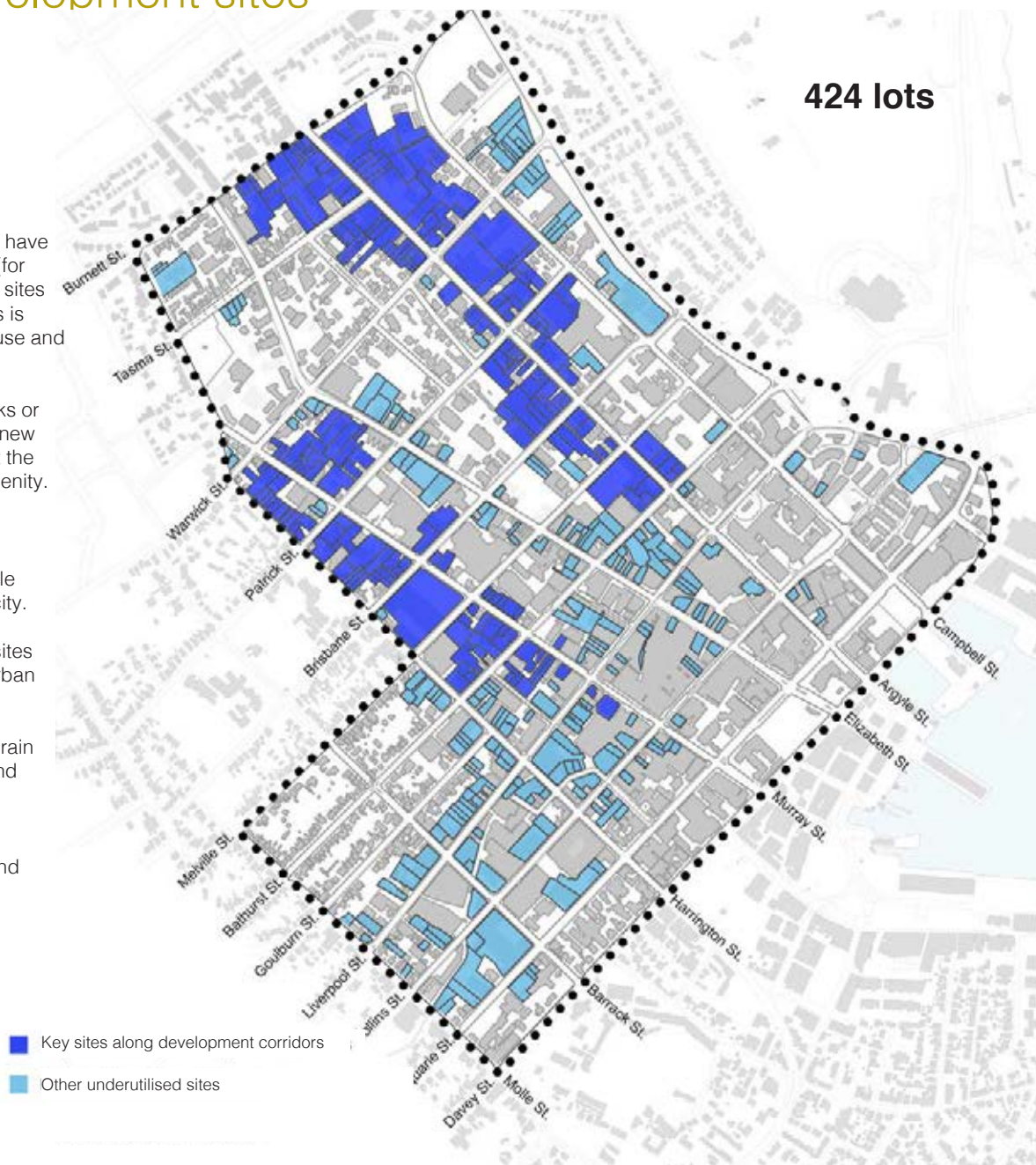
+ Reconsider the planning provisions in the Commercial Zone to ensure desirable development occurs in our expanding city.

+ Encourage master-planning of large sites to ensure an appropriate response to urban texture and scale.

+ Identify opportunities to insert a fine grain network that allows pedestrian routes and cross-block connections.

+ Consider a precinctual approach to allow more nuanced provisions within and overlapping zones.

+ Where possible, encourage public engagement and connectivity.



UNDERUTILISED SITES

potential key development sites

The potential development of underutilised sites is calculated through analysis of best practice examples to determine development density. A selection of best practice examples are illustrated in the appendix.

+ 424 identified sites **350,000 m² land (approximately)**

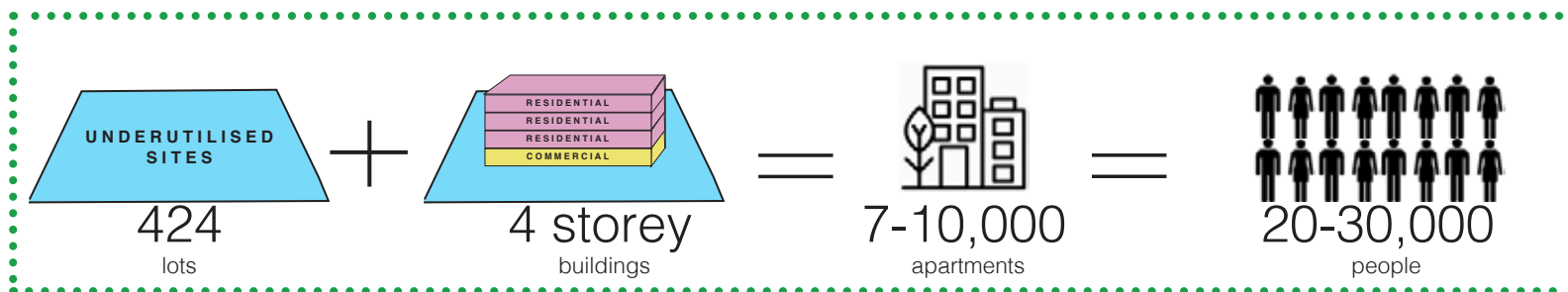
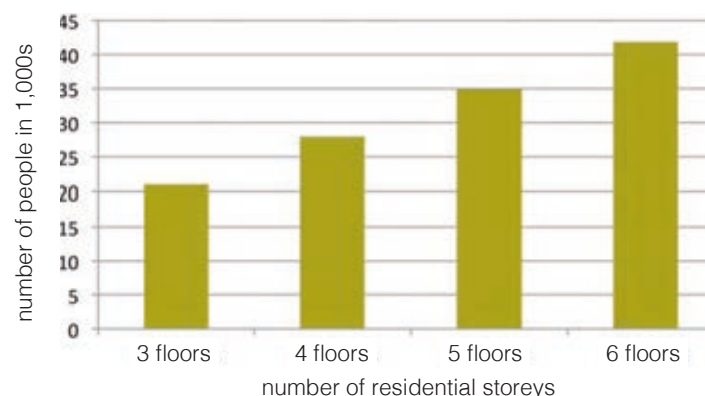
assumed Floor Space Ratio (FSR) of 4 - building height 12-15 metres
 + 1 floor commercial + 3 floors residential

Gross Floor Area (GFA) TOTAL 1,400,000 m²
 Residential GFA (3/4) 1,050,000m²
 less 30% circulation + amenities **735,000 m² residential space**

Average 3 bed apartment 100m² 7,350 apartments (3 bed)
 Average 1 bed apartment 60 m² 12,250 apartments (studio)

+ 424 underutilised sites **housing 20,000-30,000 people**

NSW Government Apartment Design Guide (SEPP 65) minimum sizes
 studio 35 m² 1 bedroom 50 m²
 2 bedroom 70 m² 3 bedroom 90 m²



example of least utilised sites:



268 Argyle Street
 Land to capital value: 100%

examples of best utilised sites:



157 Elizabeth Street (UTAS student housing)
 Land to Capital Value: 5.05%.

UNDERUTILISED SITES

potential city shaping sites

Identifying underutilised sites through the dual process of visual and data (land vs capital value) analysis revealed a series of interesting development opportunities.

This process identified key city-shaping sites that can potentially alter the urban form and character, and represent ideal development sites.

Developing speculative ideas for these sites can provide case studies that can be used to test the limits of the current planning provisions, and suggest design solutions that positively contribute to the character of the city, providing a diversity of uses and amenity.



UNDERUTILISED SITES

potential city shaping sites

103 Melville Street



20 Barrack Street



152-170 Campbell Street



1A Brisbane Street



CASE STUDY

Speculating on the development potential of 103 Melville Street, on block 21, provides ways of understanding future development opportunities and challenges.

This lot was identified as underutilised using the filter sequence as detailed below:

| | |
|-------------------------------------|-----------------------|
| Land Use: | Commercial |
| Heritage Building: | NO |
| Lot size: | 12,500 m ² |
| Land value as % of capital value: | 70% |
| Heritage Precinct: | NO |
| Visual Analysis Underutilised Site: | YES |

Currently the location of a hardware store with a large carparking area, this site is close to the city centre and on the boarder of the existing Central Business District and established inner-residential area of West Hobart.

The site is a full city block, which has strong links to a range of Commercial tenancies, and is on the Murray Street corridor, which forms an axis that links directly to the waterfront.



CASE STUDY | 103 MELVILLE STREET

site description

existing site description

This south-eastern sloping lot features a large hardware store, a timber-yard and a large parking area with some established trees. There are a number of vehicular and pedestrian access points to the site. The corner pedestrian access at Murray and Melville corner has a significant setback. There are four street frontages on the site, and there is no distinct primary frontage, although the current pedestrian entry to the hardware building is on the Murray Street frontage. The site is orthogonal except for the Murray Street alignment, which is not parallel with the city grid.

adjacent lots

Adjacent to the western boundary are two lots that are listed on the Tasmanian Heritage register. Also on the western boundary is another lot under three titles, the corner title featuring a two storey Georgian building used as a restaurant on the ground floor.

Although there are Heritage Places on the block, they do not impact development on the K&D lot, or other lots in the block, as it is within the Commercial Zone (23.0) and adjacency provisions do not apply.

site coverage

Site coverage was calculated as

| | |
|----------------------|---|
| Building coverage: | 4474m ² hardware store, 1055m ² timber shed |
| Total building area: | 5529m ² |
| Site coverage: | 48.3% |
| Car park: | approximately 50% (including access strips) |

building condition

A further visual assessment was undertaken to evaluate the existing build forms.

| | |
|--------------------|--------|
| Building Condition | Medium |
| Building Quality | Low |

The buildings are comprise of one storey structures from ground level with basement level at rear of hardware store.



Map indicating location of 103 Melville site



K&D site from northern corner

Image: Aaron Oh

CASE STUDY | 103 MELVILLE STREET

summary of current planning issues

zone

103 Melville Street is located in the Commercial Zone (23.0)

overlays

None

heritage control

Although the development site is within close proximity to two listed heritage buildings, with land adjoining the lots on which the buildings are located, the land of the site itself does not meet the requirements for application of the Historic Heritage Code (E13.0), and there are no additional street-scape requirements for development in the Commercial Zone (23.0).

links through site

In the Commercial Zone, there is no requirement to retain existing malls, arcades and through site links that are required in the Central Business Zone (22.4.8 Pedestrian Links).

access points

Murray and Harrington Street are currently free of vehicle access points. Consideration should be given to the impact that vehicular access points would have on the pedestrian amenity of the footpath due (E6.7.1 allows 1 access point to be provided for each street frontage).

building heights based on acceptable solutions

No residential use or less than 50% within the development:
The envelope maximum height is 11.5 metres.

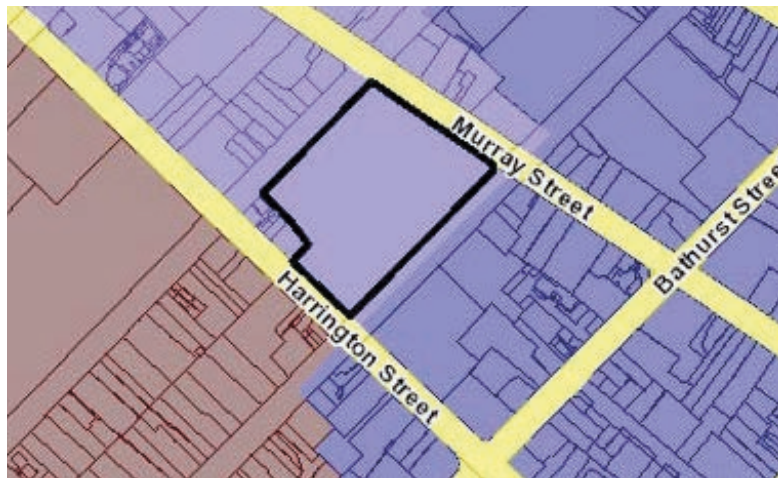
Development with at least 50% residential use above ground level:
The envelope maximum height is 15 metres.

setback

The Acceptable Solutions permit any distance not **less than 0** in the Commercial Zone, so that any distance actually meets the Acceptable Solution.

building envelope

Due to the lack of requirements to address any street-scape character or respond to the scale of adjacent Heritage Places in the Commercial Zone, if Acceptable Solutions are met and, due to distance from residential zones, no set-back is required. Potentially development could blow out to take advantage of the allowable building envelope.



Zone boundaries.
Source: the LISTmap



Historic context:
Frankland's Map c1839



Current parcels and building forms.
Source: GIS Data

CASE STUDY | 103 MELVILLE STREET

summary of current planning issues

permitted uses

The existing permitted uses are extremely restrictive, with the current zoning not reflecting the changing needs of the city. Current permitted uses are:

- Bulky goods sales – only if motor vehicle, boat or caravan sales and only on sites fronting Argyle, Murray or Campbell Streets.
- Food Service – only if a take away food premises or café
- Passive Recreation – Defined as “use of land for informal leisure and recreation activities principally conducted in the open. Examples include public parks, gardens and playgrounds, and foreshore and riparian reserves” (*HIPS 2015- Administration*)
- Residential – only if above ground level (except for access)
- Service Industry – only if motor repairs
- Storage – Except if liquid or solid fuel depot.
- Vehicle fuel sales and service – only on sites fronting Argyle, Murray or Campbell Streets

scale of the site

This is one of the largest single sites in the inner city, and consideration needs to be given to the massing of future buildings to complement the existing urban character.

opportunities

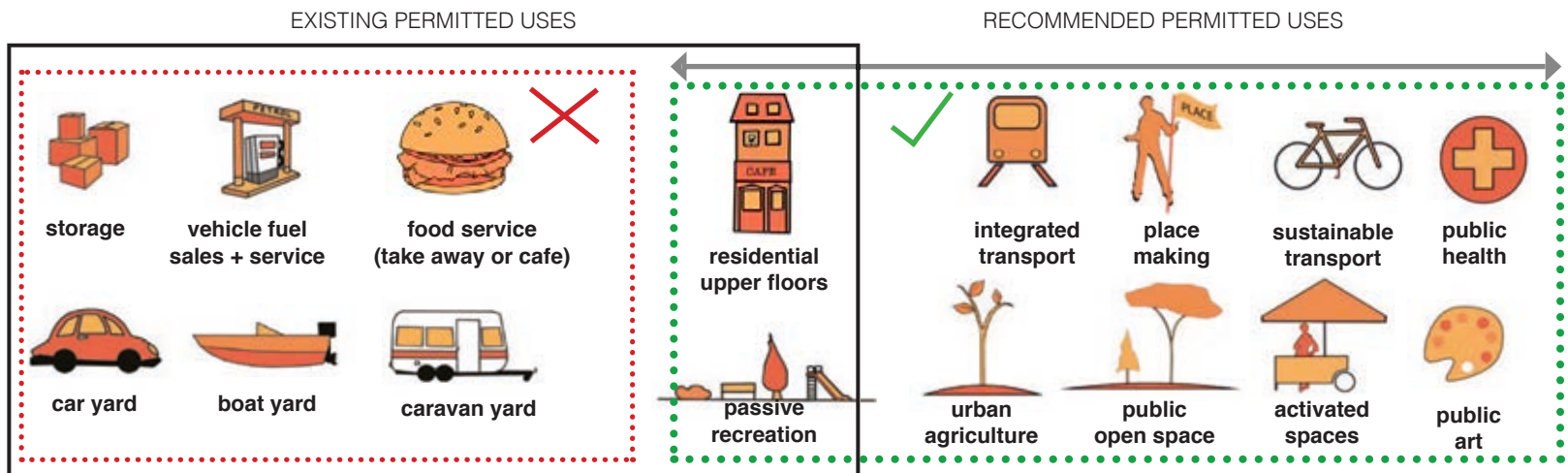
The site offers opportunities to consider cross site connections that create access points and links to neighbouring blocks and sites. This would assist in the development of a resolution appropriate to the building scale and massing to suit the neighbouring context.

commentary on existing planning provisions

- The changing uses of the evolving city could be reflected in the permitted uses for this zone.
- Consider the scale of permitted development
- The requirement to keep existing thoroughfares could be considered for the Commercial Zone where they provide a public benefit.
- If adjoining properties are on the Heritage Register, there should be Development Standards that apply accordingly.
- Changes to parking provisions reflecting changing transport modes into the future.
- It may be argued that the Parking and Access Code (E6.0) reflects an outdated and undesirable future where private car use is supported and thus encouraged.
- A review of the zoning of this block (and similarly other blocks close to the Central Business Zone) could be considered, whilst maintaining the intent for a compact city centre.

possible planning provision amendments

- Reconsideration of permitted land use
- Applying finer controls to planning zones
- Use of precinctual planning to shape different localities in the city



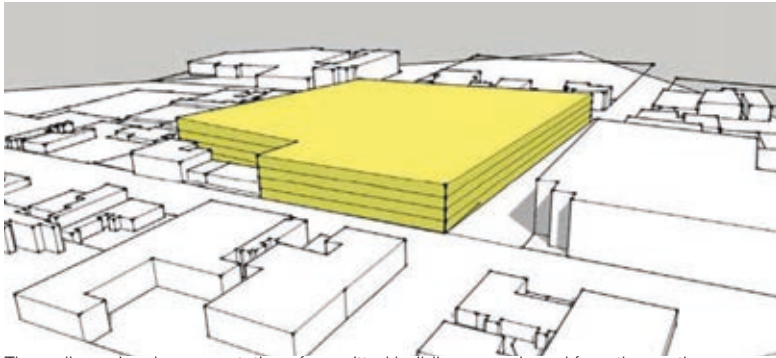
SPECULATION | 103 MELVILLE STREET

permissible solutions

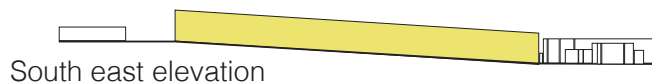
This case study below explores one of the key 'city shaping sites' identified, to test scenarios that investigate the relationship between optimum yield, residential density outcomes (residents per hectare) and the current planning constraints.

The scheme below shows a building that occupies the entire site footprint. While this fits within the current planning constraints, it does not address good urban design principles.

Commercial use (less than 50% residential above ground level) Height: 11.5m



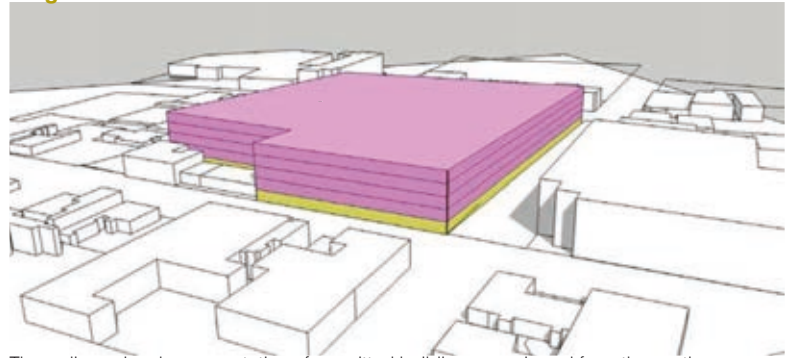
Three dimensional representation of permitted building area viewed from the southern corner
Height: 11.5 meters
Requirement: commercial use and/or less than 50% residential above ground floor



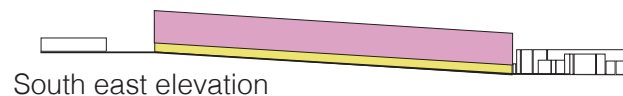
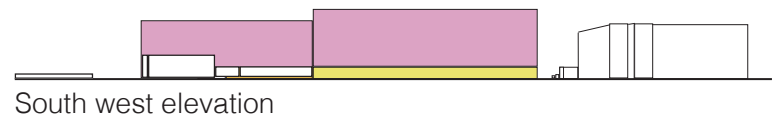
The three schemes that follow consider a range of options for the building envelope that would be permitted under the current planning scheme and present more positive urban design approaches.

Further exploration of alternative scenarios is needed to explore the potential of other options, including with higher densities, that also create positive urban design outcomes.

At least 50% residential above ground floor level Height: 15m



Three dimensional representation of permitted building area viewed from the southern corner
Height: 15 meters Requirement: 50% residential above ground floor



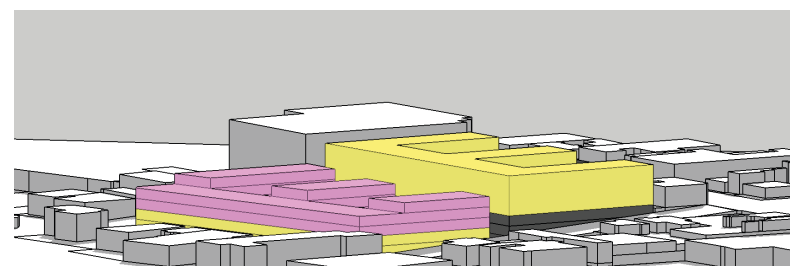
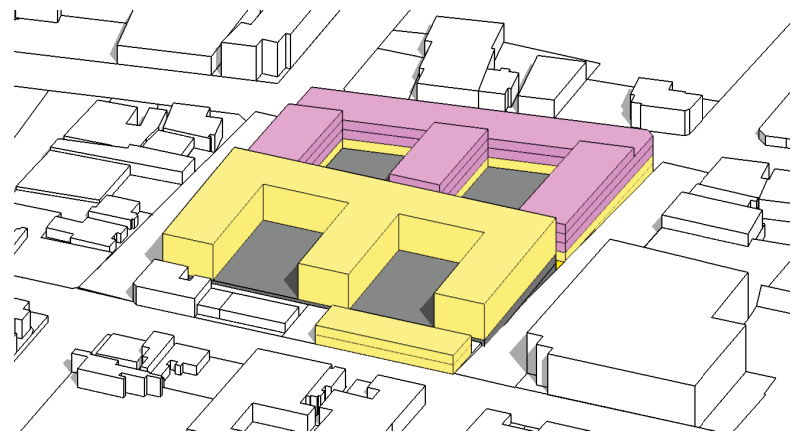
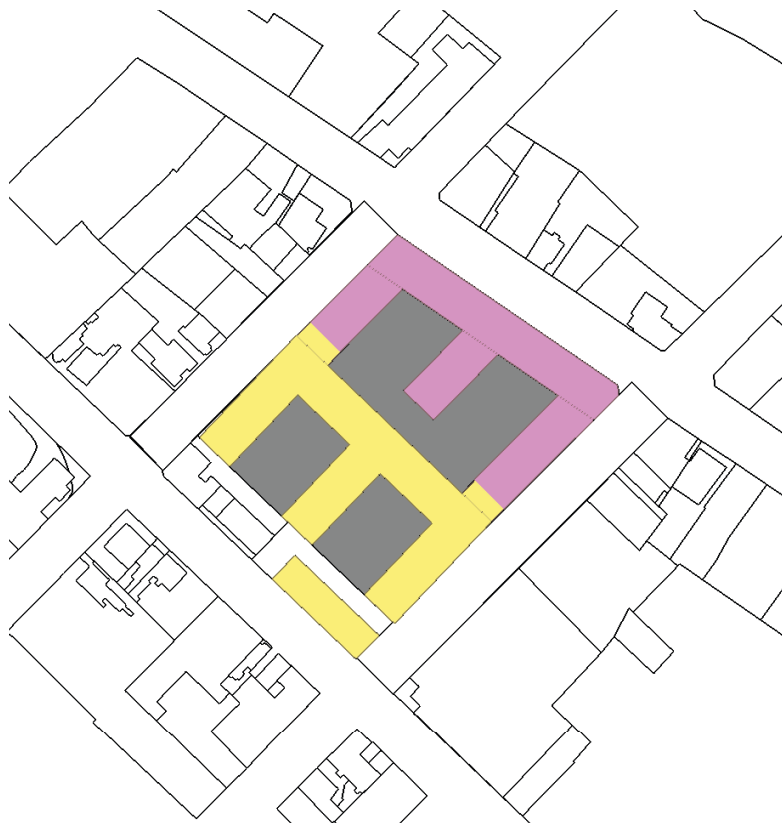
SPECULATION | 103 MELVILLE STREET

possible solutions | scheme 1

This scenario uses the current *Hobart Interim Planning Scheme 2015* as a basis to inform the programs that is possible build on site. The planning scheme states that the maximum allowable height for the site stands at 15 metres following the gradient that slopes from west to the east at 8 metres at its highest point. Double storey commercial lots with another two stories of residential above are placed on the Murray Street edge to capitalise on a busy commercial street. Parking lots are placed internally and out of sight from pedestrians coming from Murray Street. The current vehicle accesses on Melville Street and Brisbane Street are retained to allow vehicles to enter the site on different levels. A large commercial envelope is located on the south western end of the site facing Harrington Street as a response to the traffic heavy Harrington Street heading towards North Hobart.

| | |
|--------------------------------|---------------------|
| Site area: | 12500m ² |
| Total floor area: | 31237m ² |
| Plot ratio: | 1:2.5 |
| Dwellings (72m ²): | 107 |
| People: | 214 |

| | |
|--------------|---------------------|
| Residential: | 7679m ² |
| Commercial: | 9115m ² |
| Car park: | 14443m ² |



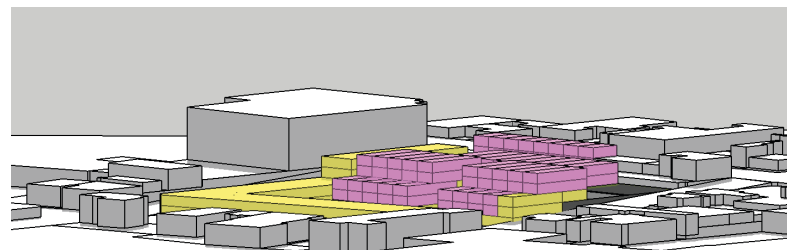
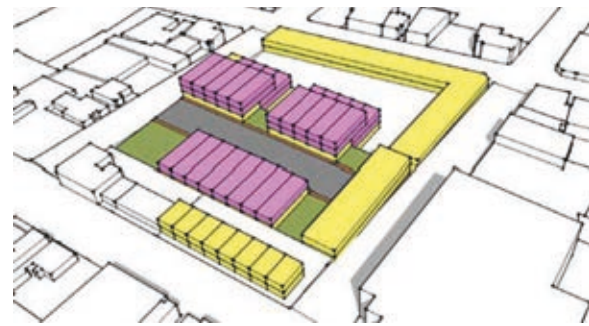
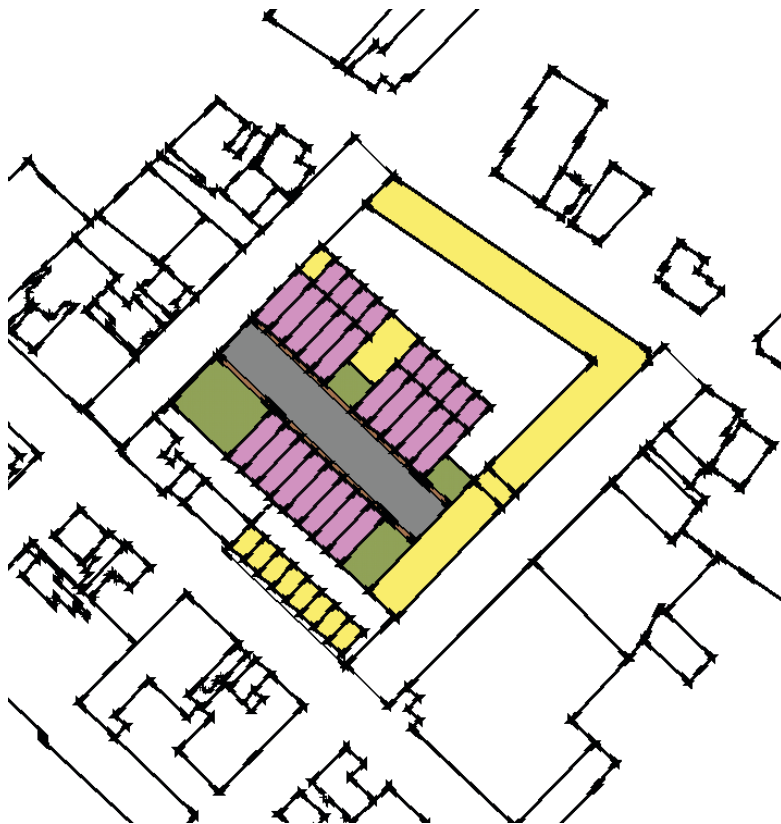
SPECULATION | 103 MELVILLE STREET

possible solutions | scheme 2

A second scenario is developed around the idea of having a commercial front on Melville and Murray Streets. Car parking is placed on the higher areas of the site to cater for that steeper drop and can be accessed through the current right of way between the site and the existing commercial lots. Townhouses are tiered on the upper and lower levels to ensure that a sight-line is maintained from Harrington to Murray Streets. In between these townhouses, a pocket park on the corner of Brisbane Street and Harrington Street promotes a visual connection with the front lawns of St. Mary's College.

| | |
|--------------------------------|---------------------|
| Site area: | 12500m ² |
| Total floor area: | 33870m ² |
| Plot ratio: | 1:2.7 |
| Dwellings (72m ²): | 70 |
| People: | 140 |

| | |
|--------------|---------------------|
| Residential: | 7404m ² |
| Commercial: | 6645m ² |
| Car park: | 19823m ² |



SPECULATION | 103 MELVILLE STREET

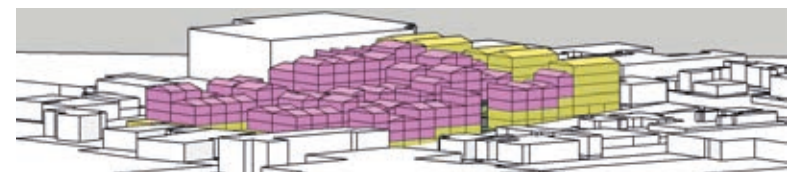
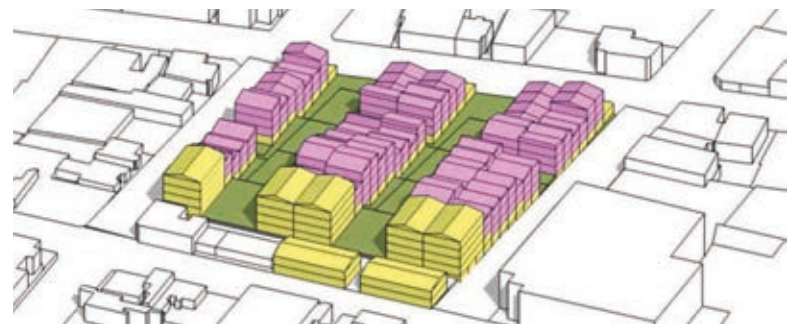
possible solutions | scheme 3

The third scenario draws on the existing pattern of lane ways and pedestrian routes, with smaller buildings used to break the scale of the large site. Commercial lots are placed on the ground level creating a new pedestrian axis that runs from Harrington Street to Murray Street. Community uses inserted into these commercial create a vibrant network for residents and general public. Offices along Harrington Street connect with the existing adjacent commercial lots. Three levels of car parking are strategically tiered following the slope of the site to ensure a smooth pedestrian network is developed between these major roads. A pedestrian axis that runs across Melville Street and Brisbane Street is also maintained on site.

This scenario serves as a thinking point to investigate the gap between what is allowed in the current planning scheme and what would be more ideal throughout the city. As a city going into a transition phase, there are many sites that are suitable for redevelopment and what can be built within the planning scheme may not be what is best for the city.

| | |
|--------------------------------|---------------------|
| Site area: | 12500m ² |
| Total floor area: | 38674m ² |
| Plot ratio: | 1:3.1 |
| Dwellings (72m ²): | 156 |
| People: | 318 |

| | |
|--------------|---------------------|
| Residential: | 11232m ² |
| Commercial: | 6578m ² |
| Car park: | 20864m ² |



SPECULATION | URBAN CHARACTER

opportunities | site character | laneways + pedestrian spaces

"Laneways offer very different urban space experiences compared to the primary street network – here you have an opportunity to explore. The intimate lanes can create a secondary network in the city, with their own separate identities... Lanes have the opportunity to have many different identities, where the artistic and playful come together. The city centre lanes have fantastic potential for strengthening the public realm and increasing pedestrian opportunities." Gehl Architects 2010 p.25

creating opportunities for connectivity

Developing the 103 Melville site will have a marked impact on the city fabric and public life; it has the potential to become a 'city shaping site' that establishes a new model for inner city development. Occupying almost a whole city block, the site presents a strong contrast to surrounding lots. The position on the border of existing commercial and residential zones offers a range of opportunities for diverse uses. Establishing public circulation through the site will assist in creating a series of vibrant spaces. Thoroughfares that accommodate pedestrian and cycling will increase connectivity and assist in mediating the scale of the block, and the provision of open spaces will improve the amenity for the adjacent neighbourhood.

lessons from melbourne | the desirability of inserting finer urban grain

Melbourne's 2015 study, *Places for People*, identified that the upgrading and activation of laneways allowed a more 'intricate and permeable urban structure'. Laneways offer a contrast to the city's uniform street grid. Their smaller scale intensifies sensory interaction and a contrast to the streetscape that fosters people-centre space with 'human scale'.

developing hobart's laneways

A series of laneways in Hobart's CBD area central to the pedestrian experience for the city. Some are an essential part of the urban sequence, while others are partially activated, are not permeable, or privatised, with connection through a shopping centre or department store. Recent upgrades to several urban spaces and connecting laneways, including Collins Court and Mathers Place, have improved opportunities for mid-block permeability and created a new series of urban spaces.

Urban Fabric: the form of cities, Yuri Artibise, July 19th 2010, yuriartibise.com/urban-fabric/



ROME



LONDON



TORONTO

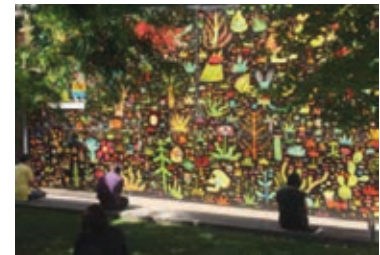


Hobart arcades and laneways

Source: Hobart Public Spaces and Public Life 2010 – Gehl Architects p.25



Hobart | Collins Court



Hobart | Mathers Place

Examples of pedestrian and cycling only streets



Amsterdam



London

SPECULATION | URBAN CHARACTER

opportunities | site character | laneways + pedestrian spaces

active transport

Considering the broader connections between 103 Melville and the adjacent highlights opportunities to strength the pedestrian and cycle networks across the city.

The map below shows the linkages required to connect to existing cycle lanes, and illustrations to the left show the location of these potential new paths.



public artworks

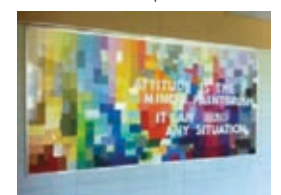
Public art could be utilised to add interest and detail, and also to evoke memories of past use, for example, connecting to the former use of the K&D site through a tiling project using a myriad of paint colours. This could also echo Max Angus' 1950's Mondrian-esque façade of Construction House, and the use of tiles on the office buildings on the adjacent corner.



Existing site



Inspiration: other examples in Hobart



Drawing on previous use of site to influence ideas for public art

greening | urban food garden + pocket parks

Public open space could incorporate a pocket park, urban food garden or community greenhouse, particularly along the north and east of the site, facing Melville or Murray Streets.



SPECULATION | CASE STUDY COMPARISON

santos place | brisbane

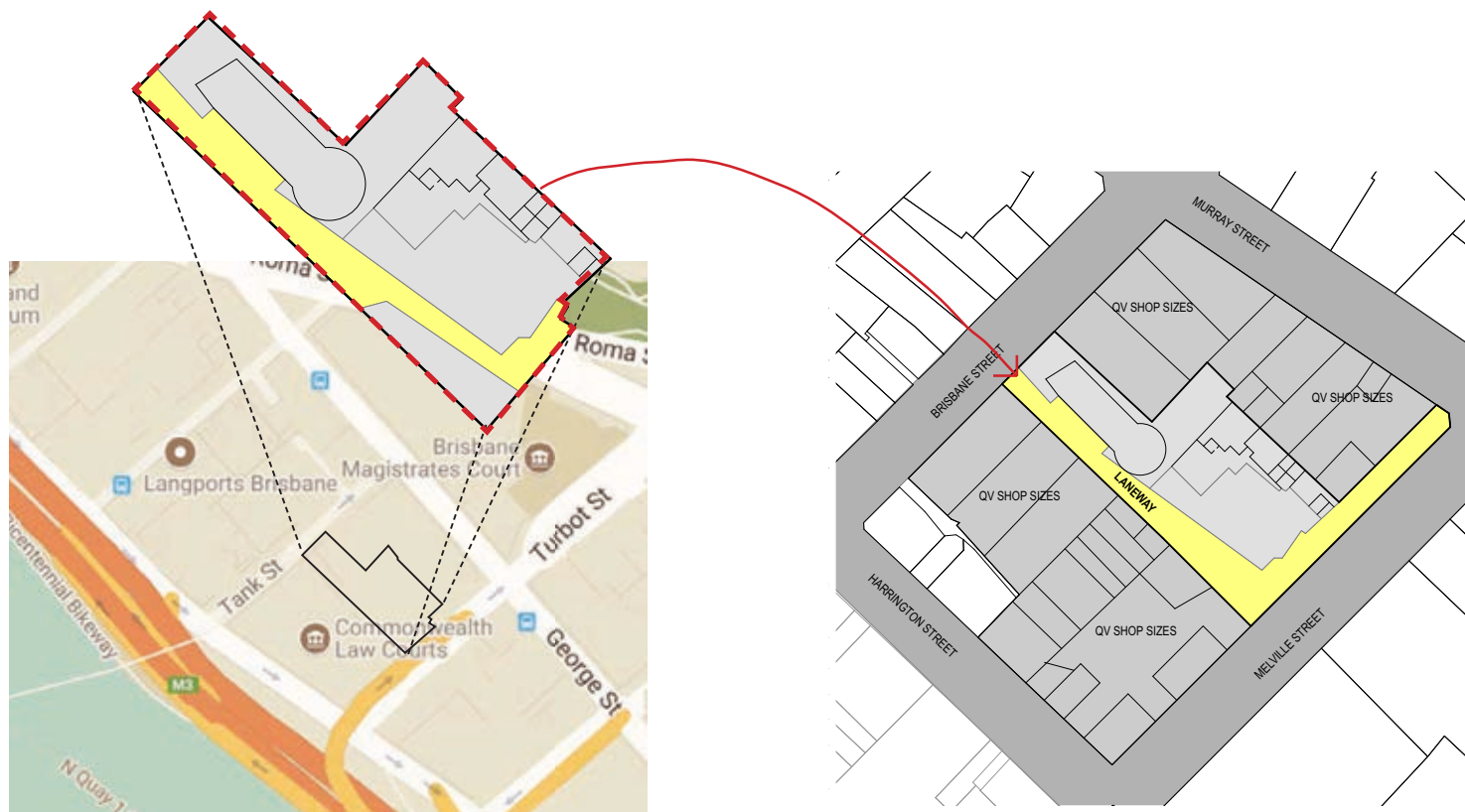
Santos Place building designed by Donovan Hill architects embeds a covered lane way to create public space in an otherwise private building. This creates pedestrian links between the river and the city. The ground plane uses 'domestic' sizes and appearances to create a human-scaled public space.

The building contains a private office tower which is the largest building in Australia to gain a six star energy rating.

Donovan Hill state that an aim was to create a "...people friendly setting that signals a less corporate way of developing cities, providing multiple functions to promote activities that engage with the public realm of the street and 'lane'."

santos place overlaid on 103 melville

Overlaying the Santos Place building on the 130 Melville Street site, provides a way of understanding possibilities for a connecting lane way through the site. This could give an alternative pathway from Melville Street to Brisbane Street, with a retail edge lane creating the core of the site. The lane way would increase engagement and connectivity with the site, creating a positive pedestrian environment.



SPECULATION | VISUALISATION

103 melville | speculative scenario 01

Overlaying Santos Place onto the 130 Melville Street site shows the way an pronounced entrance and lane-way would allows for engagement at ground level.



SPECULATION | CASE STUDY COMPARISON

QV melbourne

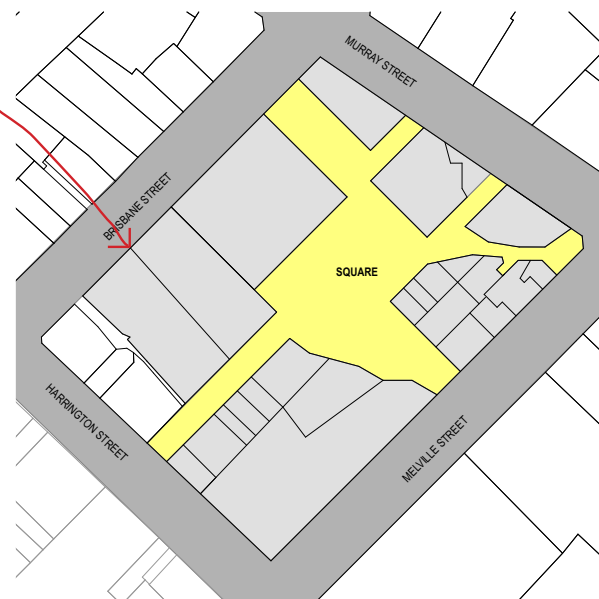
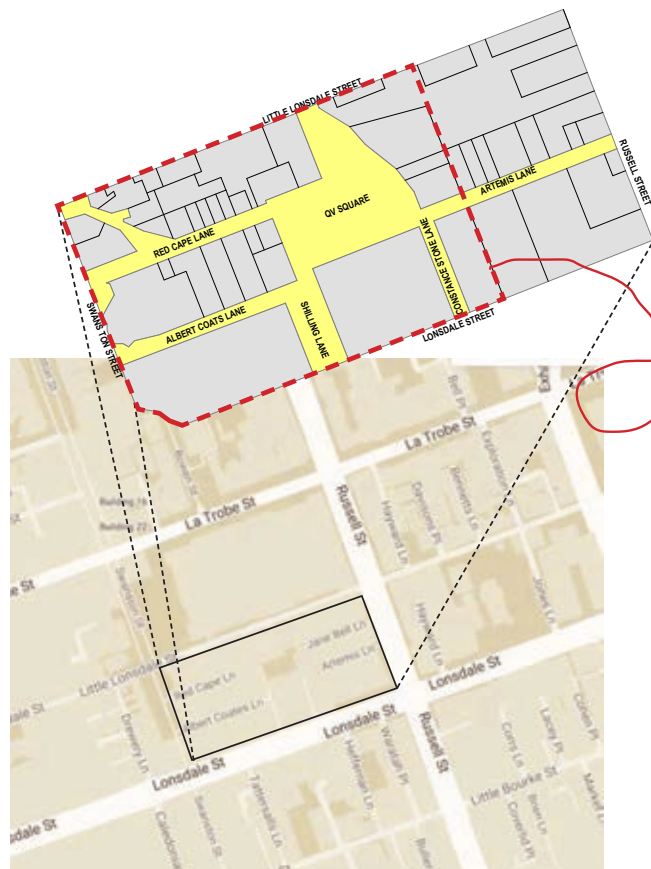
The QV Melbourne shopping precinct was built on a whole inner-city block in Melbourne. By using a master-planning approach and utilising different architects for various components, the precinct takes the form of an 'Urban Village'. It uses the lane ways of Melbourne as a generator for form, splits the site into four and with the use of different architects, the experience of the site is diverse.

The site contains two apartment towers, two office blocks, retail, basement food court, a public square and lane ways, the heritage listed Queen Victoria Women's hospital, and a car park.

The developer of the site was Grocon, with the lead architects B+N divided the spaces between local architecture firms; Denton Corker Marshall, Lyons, McBride Charles Ryan, John Wardle Architects and Kerstin Thompson Architects.

QV melbourne overlaid on 103 melville

By overlaying a majority of the floor plan of the QV Melbourne precinct on the 103 Melville Street site, it can be seen that the overall strategy of using lanes to connect through the site to a central square could work for the K&D site. The idea of using different architects to create variation of character would suit the site due to its large area and its location within the city. This would be a way to address the character of the area and to reduce the impact that such a large development would have on the site.



SPECULATION | VISUALISATION

103 melville | speculative scenario 02

The QV Melbourne site shows how the varied urban textures and lane ways create permeability. The master-planning of the site could allow for a stage development, accommodating a diverse range of uses and activities.



UNDERUTILISED SITES | DEVELOPMENT POTENTIAL

hobart | potential development precincts

murray street precinct

- Neighbourhood Character
- Mixed use Family apartments
- Private town-houses
- Community green space
- Public and commercial ground plane



St Mary's College



Harrington St. Cottages



Italian Pantry

rivulet precinct

- Transition between Residential and inner city
- Mid rise mixed use development
- Small business' and Residential amenities on ground plane



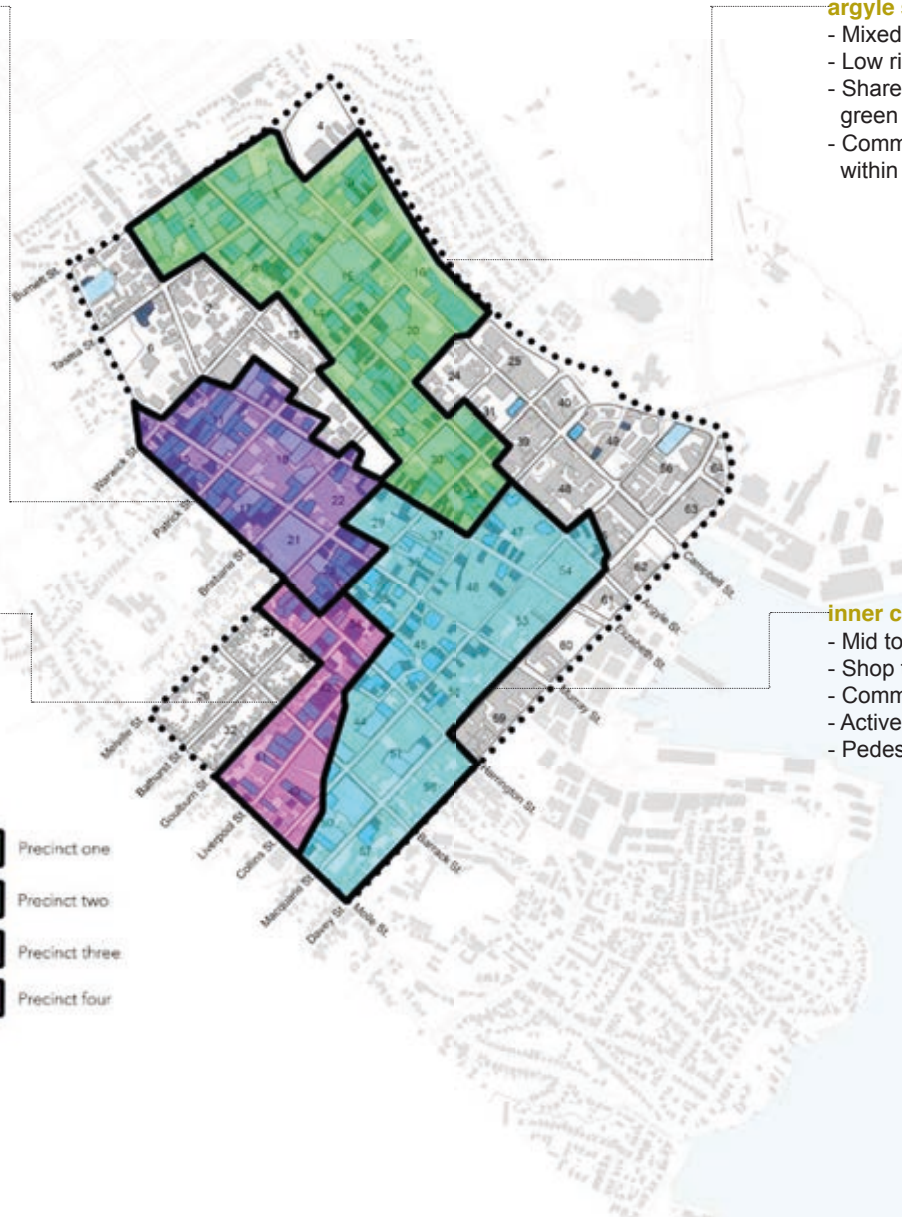
210 Collins St.



Johnson Bros. Factory



Westside Laundromat



argyle street precinct

- Mixed use residential complexes
- Low rise development
- Shared urban spaces & public green space
- Community and amenities hub within precinct



Peters Ice Cream building



Argyle St. Houses



Fire Brigade building

inner city precinct

- Mid to high rise development
- Shop tops and infill
- Commercial upper floors
- Active streets and ground plane
- Pedestrian focus



Elizabeth Street buildings



Elizabeth St. Mall



Mather's Lane

UNDERUTILISED SITES | DEVELOPMENT POTENTIAL

hobart | potential development precincts

murray street precinct

strengths

Proximity to schools
Close to West Hobart residential areas
Mixture of small and large lots
Easy walking distance to CBD

weaknesses

Large amount of sloped sites
Large amount of large utilised commercial sites

opportunities

To create a neighbourhood that draws more families into the area
To develop the area with a defined character and appeal

threats

The large underutilised sites could attract similar commercial development
Planning scheme encourages industrial development

rivulet precinct

strengths

Close to schools
Close to the CBD
Close proximity to residential area
Mixed lot sizes
Close to rivulet park

weaknesses

Heavy traffic route
Little existing green space
Little existing public space
Underutilised lots spaced out
Limited foot traffic

opportunities

To create some community hubs within precinct
Enable an active fringe between residential zone and city
Increase visitors to Rivulet area

threats

Harder to create “character” with lots spaced out
Low foot traffic means less incentive for development

argyle street precinct

strengths

Large area of conjoined underutilised sites
Mostly flat sites
Easy walking access
Proximity to North Hobart restaurant district and Queens Domain
Mostly large sites

weaknesses

Many large well utilised commercial sites
Majority of underutilised sites are to the North, further from the CBD, making walking a less viable form of commuting

opportunities

Possibility for cohesive precinct character
Opportunity to have more lower height developments
New public space incorporation on large sites

threats

Large underutilised sites could attract similar commercial development
Planning scheme encourages industrial development

inner-city precinct

strengths

Inner city location
Easy walking distance to city amenities
Presence of amenities
Good transport links

weaknesses

Few large sites
Scattered underutilised lots
Overshadowing by tall buildings
Noise pollution

opportunities

Good area for mixed use development
Small lots provide opportunities for small developer and private investment

threats

Developments could have negative affect on inner city character

UNDERUTILISED SITES | DEVELOPMENT POTENTIAL

hobart as connected city | lessons from helsinki



living network city

- Turning the cores of district centres into a series of functionally independent neighbourhoods with their own identity and positive image.
- New rail network intersects at district centres.
- Urban environment developed from the pedestrians' and cyclists' perspective.
- Stricter parking policy has been adopted in the centres, while also creating zones of pedestrian streets.

transforming motorway-like areas into residential use

- Reducing high volume traffic and replacing with diverse residential and workplace buildings
- Areas filled with a variety of quality housing typologies.
- Residential buildings developed in good locations.



UNDERUTILISED SITES | DEVELOPMENT POTENTIAL

hobart as a 'city garden' | lessons from singapore



green Living

- Allow for relationship with nature within the city
- Integrate greenery directly into infrastructure, ie. "Housing in a Park"

amenities within Walking Reach

- Allow for day-to-day conveniences within hubs
- Distribute amenities such as retail shops, hawker centres, childcare centres, places of worship, healthcare facilities and community clubs evenly throughout estates for the easy access of residents

enriched Identity

- Ensure sustainability and vibrancy of the HDB heartlands
- Towns will continue to be enhanced with projects that promote better living environments and encourage social interaction among residents



FUTURE DEVELOPMENT BEST PRACTICE

One aspect of livability is housing type, with particular qualities affecting apartment livability including how the spatial model accommodates different demographics, the provision of communal space, amenities, daylight access and private outdoor space.

Small 0-500m²

Infill developments
- housing and mixed use

Medium 500-1,500m²

Provides civic return
- eg. green space

Large >1,500m²

Provides cross site links
Provides high civic return

resident demographic

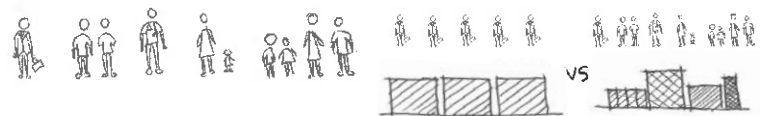
In order to create a lively urban community, it is desirable to have a diverse demographic of residents living throughout the city. This creates a more balanced community and helps discourage the development of a segregated urban population. A diverse demographic can be achieved through:

- Mixed apartment and housing typologies
- Diverse public amenities
- Housing options that appeal to a broad range of residents

In order to attract a variety of people to live in the city, a range of different apartment typologies should be available, both within precincts and within apartment blocks. Some of the main typologies are:

- Family home: more bedrooms, larger living areas and ample storage space, with safe access to public parks and transport links to schools
- Town house: small, high quality apartments with access to entertainment space and links to city workplaces and parks/leisure spaces
- Studio/Bedsit: small studio or one bedroom apartments with little living space, but with good access to communal and public leisure spaces.

resident demographics



BEST PRACTICE | DESIGN CRITERIA

housing qualities

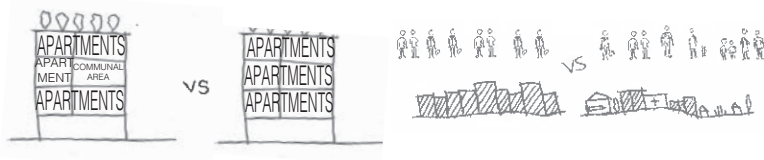
communal spaces + amenities

Communal space is essential for successful high density living. Urban residents have less access to private outdoor, entertainment and living space. As such, the communal areas within their apartment complex and/or public spaces throughout the city become their backyards and living rooms, where they spend the majority of their leisure time. Some communal spaces that can be integrated into city living include:

- Parks and green space
- Garden and vegetable plots
- On-site communal entertainment spaces
- Cafes and restaurants

By incorporating amenities such as cafes, bars, restaurants, parks, and recreation into a residential lot, the amenity can not only increase liveability to the occupants, but the neighbourhood around it.

communal spaces + amenities



daylight access + private outdoor space

Access to daylight and sunlight is an important part of multi residential design. Overshadowing and undesirable orientation can greatly impact the liveability of inner city apartments. Families tend to prefer properties that have access to private or semi-private outdoor spaces similar to outdoor spaces present in the suburbs. Successful daylight, sunlight and outdoor space design includes:

- Careful apartment orientation
- Setbacks from neighbouring buildings
- Single depth apartment blocks
- Stepping back higher levels
- Courtyards and internal light wells
- Use of cladding with high reflective values to help light reach lower levels

daylight access + private outdoor space



BEST PRACTICE | DESIGN CRITERIA

city quality | public space

The region, sphere, or domain within which anything occurs, prevails, or dominates available to anyone.

Public space is the main factor that determines the character and appeal of a city to those experiencing it. Cities that use public space well create an active, inviting urban environment and a positive experience for those inhabiting it.

"As a pedestrian in the city, you ought to feel comfortable, safe, and captivated by the details of what your eyes see."(City at Eye Level)

It is also important to consider the public realm of the city, which includes not only public space, but also anything that pedestrians can see or interact with, such as shop fronts and façades.

Aspects to consider when creating successful public spaces and urban communities are:

- Parks and green space
- Active ground plane
- Streets as places
- Pedestrian links
- Community event space

parks + active ground spaces

Parks and green spaces play an important role in cities, creating spaces of rest, recreation, and socialisation. This can be achieved by:

- Various sized green spaces throughout city,
- Green space on public lots and incorporated as part of large private lots
- Communal green spaces that encourage community engagement and activity

Having an active, accessible ground plane has a significant impact on how public space works in a city. This can be achieved through:

- Public ground floors
- Permeable built fabric
- Inviting thresholds
- Activated streets

parks + active ground spaces



BEST PRACTICE | DESIGN CRITERIA

city quality | public space

streets as places + pedestrian links

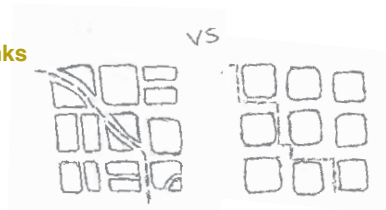
Appealing, pedestrian friendly streets can significantly change how people interact with public street-scapes. Examples include:

- Allowing for hybrid zones
- Places to sit and rest zones
- Inviting and safe for pedestrians
- Some form of shelter from wind, rain and sun
- Good tree canopy to provide shelter and atmosphere

Using public space to create safe pedestrian and cycling links throughout the city can greatly increase the appeal of urban living and decrease reliance on motorised transport. Examples include:

- Connecting Lane ways and arcades throughout the city
- Pedestrian only streets, lane ways, and overpasses
- Green spines/pedestrian spines that connect existing public spaces

streets as places + pedestrian links



community event Space

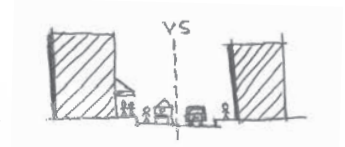
Designing public spaces that can cater for community events creates more of a connected urban community, increasing amenity through:

- Designing public spaces that are suitable to host events such as markets, social sport, community groups, music and cultural events
- Making streets around public spaces more pedestrian friendly
- Incorporating event space amongst residences and local businesses to encourage community involvement

Bringing schools and public amenities back into the city can encourage a wider demographic of residents to live in the city rather than in outer suburbs.

- Primary and high schools
- Health centres and general practitioners
- Sports and leisure facilities
- Aged care facilities

community event Space



BEST PRACTICE | DESIGN CRITERIA

city quality | permeability

The extent that the building envelope permits or restricts penetration, whether physically or visually.

Permeability is an important factor in urban design. The inclusion (or exclusion) of permeability can change the conception of the building by the viewer drastically. Having high levels of permeability can increase the engagement that the site has with its surrounds and those occupying it.

Guides to achieve permeability:

Visual permeability | windows + openings

Physical permeability | alleyways + through routes

Thresholds

Set backs

Lane ways

Active ground plane

visual + physical permeability

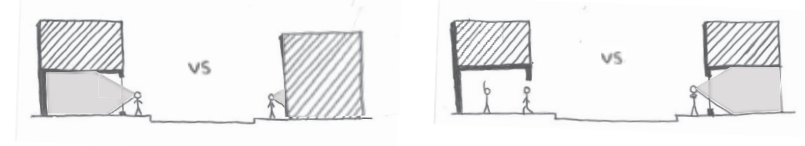
Using glazing, especially on the ground floor of a building, greatly increases the permeability of the facade. Windows allow for:

- A connection between inside and out
- Seeing activity within the building
- A reduced sense of boundary

Permeability and accessibility can also be achieved through:

- Identifying access points clearly
- Having inviting openings
- Minimising car access to building to increase pedestrian safety
- Having multiple openings along a long expanse of facade

visual + physical permeability



BEST PRACTICE | DESIGN CRITERIA

city quality | permeability

thresholds + setbacks

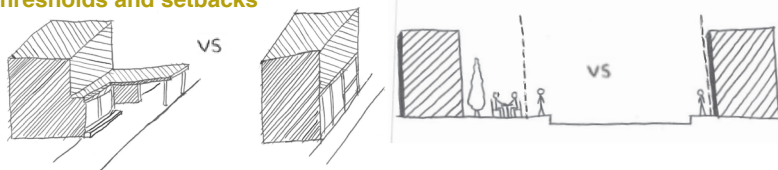
Expanding the entry threshold can blur the boundary between inside and outside. Thresholds should:

- Use materials and/or form to signify entrance
- Use materials and/or form to lead person to an entrance
- Have materials/forms that do not terminate at the same point
- Communicate the nature of the entrance

Setbacks can increase the permeability of the point of entry inside the site boundary. Setbacks can give opportunity for:

- Public plazas
- Public gardens
- Event spaces
- Seating opportunities

thresholds and setbacks



lane ways + active ground planes

Lane ways provide an opportunity to create pedestrian permeability through the site. Lane ways can:

- Increase pedestrian accessibility to building
- Increase shop frontage opportunities
- Decrease the impact a large site has on the public

The use and activity that occurs on the ground plane can have a large impact on the perception of permeability. Having an active ground plane can:

- Decrease the impact of site boundaries
- Create a feeling of accessibility and welcoming
- Increase usage of site

lane ways and active ground plane



BEST PRACTICE | DESIGN CRITERIA

city quality | urban grain

The spacial arrangement of buildings and how they impact the public realm defined by their edges.

Urban grain gives the character and feel of the spaces contained within buildings. The ways a building contribute to the public realm can shape the way in which the area around it is both perceived and used.

guides to achieve urban grain:

Heights
Setbacks
Form
Materials
Master planning
Vegetation

overall height + building massing setback

The height of a building has significant impacts on its surrounds.

The height of a building should be:

- Sympathetic to its context
- Reduce impacts of shadowing
- Reflect the buildings use

When the buildings use requires a height higher than what is sympathetic to the context, setbacks can be used to decrease the impact of height in the public realm.

Setbacks should:

- Be made so building is hidden from line of vision from street

overall height + building massing setback



BEST PRACTICE | DESIGN CRITERIA

city quality | urban grain

form + materials

The form of a building can be used to add to urban texture.
Form can be used to:

- Reduce the impact of size of a building
- Reflect the function of the building
- Add texture to the public realm
- Provide seating/outcrops/shade

Materials used of a buildings facade can add to the urban texture:

- Reduce the impact of the size of a building
- Be sympathetic to context
- Signify entrances
- Reflect function of building

reducing visual bulk

Master planning large sites can prevent undesirable block developments, and encourage finer grain within the city. Master planning can improve urban texture by introducing more variety to a large site.

This can be achieved by:

- Using varied façade treatments, both in materiality and form
 - Using multiple architects for a site
 - Incorporating public space
 - Dividing large blocks with lane ways and arcades
- Vegetation can add urban appeal to any inner city area, by::
- Allowing for trees in the design
 - Allowing for grassed areas or planters
 - Incorporating green walls and rooftop gardens

form + materials



reducing visual bulk



BEST PRACTICE | PRECINCT PLANNING

west melbourne

A recent structure plan for West Melbourne has been developed by the City of Melbourne to guide future growth and development. It includes a precinctual planning approach based on the character of each of the areas identified within West Melbourne as having a particular relationship between topography, landscape, built form and public space. A similar approach could guide a precinctual planning approach to development in Hobart's inner-city areas.

Celebrating West Melbourne's different places

- West Melbourne has evolved to include a mix of building types and uses, from low rise heritage cottages in the north, mid-rise factories and warehouses in the middle to larger scale high-rise apartment buildings in the south.
- The structure plan takes a character approach to planning for the future of West Melbourne by identifying five distinct 'places' within the area.
- These places have been identified based on their character - the way buildings, landscape and topography, and the way public and private areas relate to each other.
- The five places are Spencer, Flagstaff, Adderley, Station Precinct, Historic Hilltop, as shown opposite.
- The structure plan defines a vision, design objectives, built form controls and priority street improvement projects for each place (see Part Three: Places).



Source: West Melbourne Structure Plan (2017) p. 11

BEST PRACTICE | PRECINCT PLANNING

west melbourne



BEST PRACTICE | GOALS + VISIONS

helsinki

Helsinki Plan: Vision 2050 identifies key strategies:

1. Urban Metropolis Pulsating with Life
2. Appealing Living Options
3. Economic Growth and Jobs
4. Sustainable Mobility
5. Recreation, Urban Nature and Cultural Environment
6. Seaside areas
7. International Helsinki and Helsinki as Part of the Region

living network city

- Turning the cores of district centres into ten functionally independent neighbourhoods with their own identity and positive image.
- New rail network intersects at district centres.
- Increased construction rights and the reduction of traffic zones to support the enhancement of land use and urban land use solutions.
- Urban environment developed from the pedestrian's and cyclist's perspective.
- Stricter parking policy has been adopted in the centres, while also creating zones of pedestrian streets.

transforming motorway-like areas into residential use

- Reducing high volume traffic and replacing with diverse residential and workplace buildings
- Areas filled with a variety of quality housing typologies.
- Residential buildings developed in good locations.

ensuring services and the diversification of housing by means of supplementary construction

- Encouraging quality supplementary construction that improves current areas.
- Care taken for surrounding urban areas.
- Strategic choices made to promote high quality high-density construction.
- Plot-specific supplementary construction encouraged by removal or requirement for parking.

development and enabling innovative housing options

- Allowing for a number of distinctive areas with their own strong identities.
- Test construction opportunities are supported regionally or locally to find innovative housing construction solutions.
- "The city by the sea" offers more innovative housing solutions such as: Floating houses and structures, car-free island communities, mobile housing (house boats), pier structures standing on sea bed.
- Families with children encouraged to move into central areas
- In city centre, attic construction, use of yard buildings and other forms of small-scale supplementary construction have enabled the creation of new and interesting housing solutions whilst retaining heritage character.
- Where ocean views are not available, appeal must be proved through other means, such as landscape, history and identity.
- Residents' chances to influence their housing arrangements will be encouraged.

increasing appeal of area - quality of environment

- Provide pleasant living environments and residents' opportunities for active urban living.
- Space for urban gardening, improving children's playgrounds and young people's opportunities for activities are provided.
- Ways to populate outdoors are supported.

BEST PRACTICE | GOALS + VISIONS

helsinki



BEST PRACTICE | GOALS + VISIONS

singapore

Key strategies in Singapore:

1. Housing
2. Transport
3. Economy
4. Identity
5. Recreation
6. Public Space

Green Living

- Allow for relationship with nature within the city
- Integrate greenery directly into infrastructure, ie. "Housing in a Park"
- Create a central Boulevard Park to form the town's verdant green spine
- Connect all four unique neighbourhoods with seamless pedestrian and cycling connectivity

Keeping Homes Green - HDB Greenprint:

- Encourage sustainable developments in homes
- Utilise HDB Greenprint as a community-centric framework for eco-friendlier public housing developments

Amenities within Walking Reach

- Allow for Day-to-Day Conveniences within hubs
- Distribute amenities such as retail shops, hawker centres, childcare centres, places of worship, healthcare facilities and community clubs evenly throughout estates for the easy access of residents

Building Elderly Friendly Communities:

- Plan an accessible network of facilities to meet the needs of a growing elderly populace
- Include day-care centres, medical clinics, Seniors' Activity Centres and multi-generational Activity Corners, to support healthy and active lifestyles

Enriched Identity

- Create a Remaking our Heartland (ROH) programme
- Renew and further develop existing Housing and Development Board (HDB) towns and estates
- Ensure sustainability and vibrancy of the HDB heartlands
- Make Singapore a distinctive and endearing home for all
- Towns will continue to be enhanced with projects that promote better living environments and encourage social interaction among residents
- The ROH programme builds on each town's unique location and identity to create endearing homes for all

BEST PRACTICE | GOALS + VISIONS

singapore



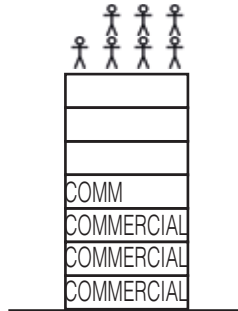
BEST PRACTICE HOUSING | SMALL

strasbourg offices and housing | dominique coulton

built footprint

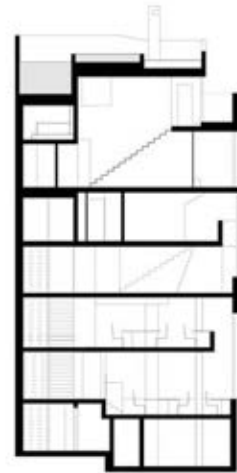
120 m²

120 m²
lot size



MIXED USE

60 m²
per person



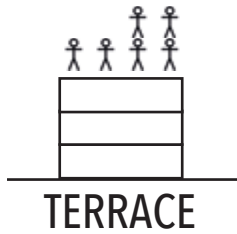
BEST PRACTICE HOUSING | SMALL yokohama apartments | ON design

built footprint

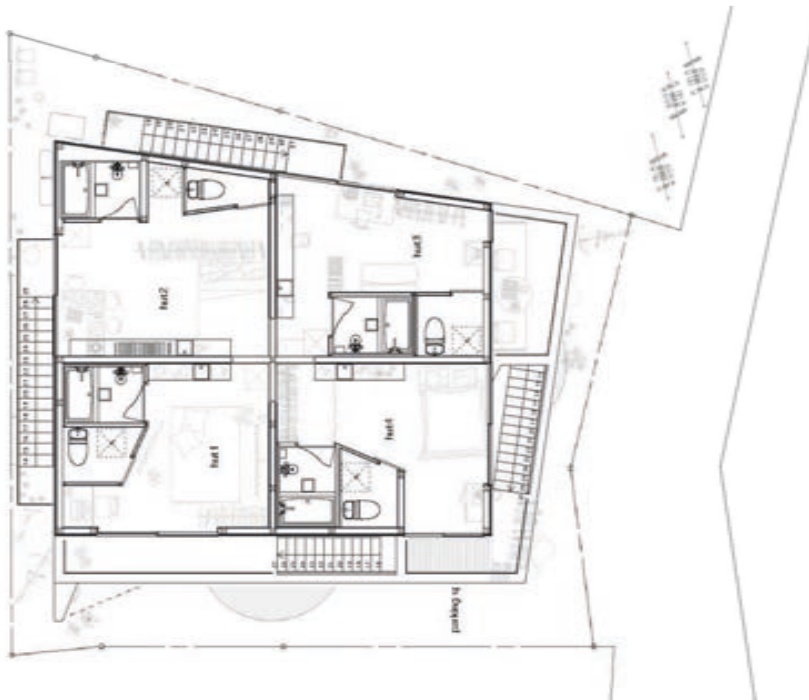
113_{m²}

180_{m²}

lot size



60_{m²}
per person



BEST PRACTICE HOUSING | MEDIUM

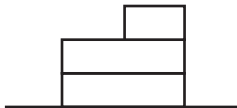
envi micro urban village micro terrace | degenhartSHEDD

built footprint

350 m²

539 m²
lot size

28



TERRACE



48 m²
per person



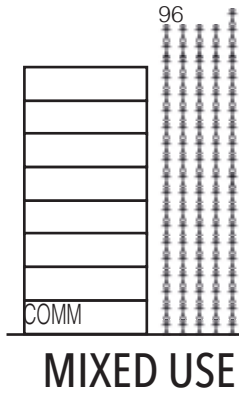
BEST PRACTICE HOUSING | MEDIUM

the commons | hobart | core collective architects

built footprint

454 m²

540 m²
lot size



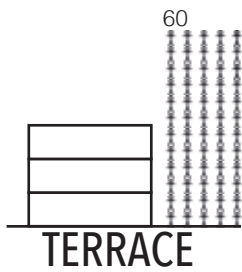
42 m²
per person



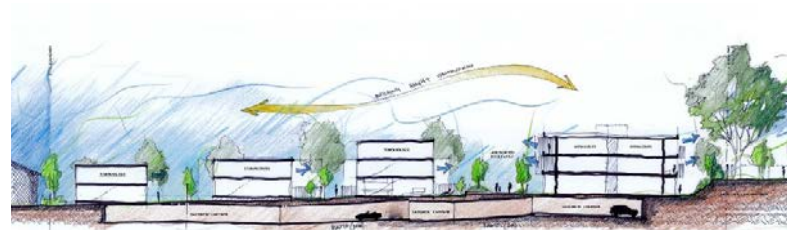
BEST PRACTICE HOUSING | LARGER

cantala | SJB architects

built footprint
1620_{m²}
lot size
3723_{m²}



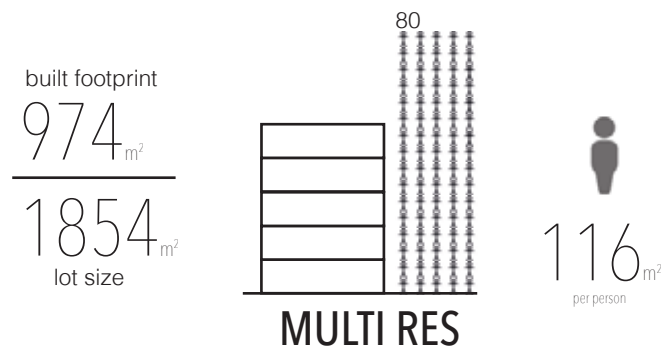

186_{m²}
per person



Level 1 Plan

BEST PRACTICE HOUSING | LARGER

le bourg dwellings | archi5



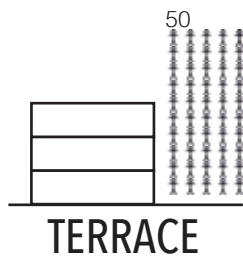
CASE STUDY | HOUSING | LARGE

heller street park + residences | six degrees architects

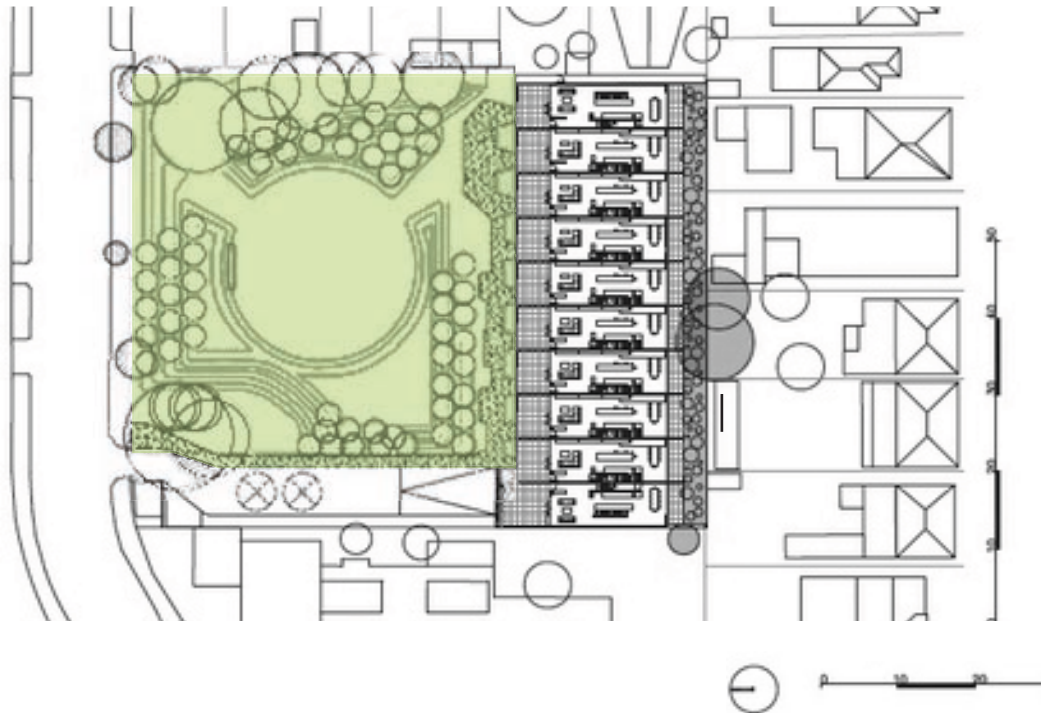
built footprint

982 m²

3961 m²
lot size



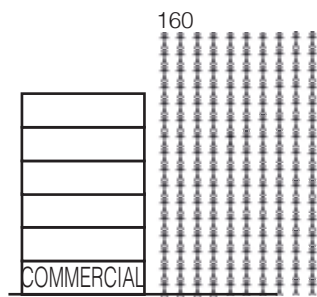
238 m²
per person



CASE STUDY | HOUSING | LARGE

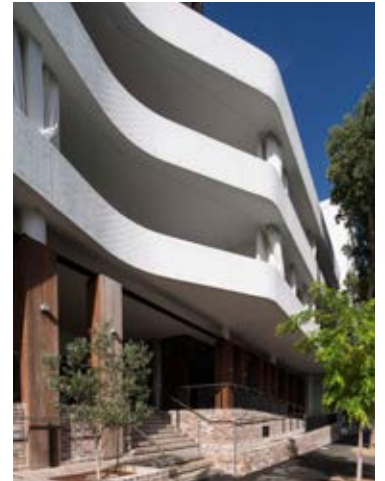
casba | SJB architects

built footprint
2922 m²
lot size
3886 m²



153 m²
per person

A small icon of a person is positioned above the text '153 m² per person'.



REFERENCES

REFERENCES

bibliography

Campbell, H. (2002) Planning: An idea of value the town planning review, Vol. 73, No. 3, September 2002.

City of Melbourne, West Melbourne Structure Plan: Draft for Engagement, July 2017

City of Hobart, Glenorchy City, State of Tasmania (2016): Infill Development Pilot Project Stage Two Report: Emma Riley + Associates, September 2016.

Gieseking, T.J, W. Mangold, C. Katz, S. Low, and S. Saegert (Eds.) 2014 The People, Place and Space Reader, New York, Routledge.

Heart Foundation PIA Aust Local Govt Assoc. (2009) healthyplaces.org Healthy Spaces and Places Design Principle – Connectivity and Permeability.

Hobart 2010 Public spaces and Public Life: A city with people in mind. Gehl Architects and Hobart City Council: Hobart, 2010.

Leigh Woolley (2016) Hobart Interim Planning Scheme 2015 - Central Business Zone Height Standards – Performance Criteria Review - December 31 2016

Pitt & Sherry (2014) Infill development within greater Hobart, Stage 1 report, March 2014 for DIER, Pitt and sherry, Hill PDA consulting.

Places for People: Establishing a Platform of Evidence to shape Melbourne's Future, City of Melbourne, Melbourne, 2016.

Population Australia: Hobart population 2018, 2018: <http://www.population.net.au/hobart-population/>.

Speculate: 430 @ Melville: Hobart , 2017 , University of Tasmania and Hobart City Council.

Sternberg, E. (2000), The integrative theory of urban design: Journal of the American Planning Association, 2000: 66(3): 264-278, Chicago, IL.

Stein, L.A. (2008) Principles of Planning Law, Oxford University Press.

Tasmanian Tourism and Information Centre, Cruise Arrivals Hobart 2016-2017, 2017: <http://www.hobarttravelcentre.com.au/wp-content/uploads/2016/07/Cruise-ship-schedule-2016-2017.pdf>

Tim Stonor, 2016, Timstonor.wordpress.com
Permeability and Connectivity: A tale of two cities, January 5, 2016.

